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DECEMBER 1956

# Educational Leadership

JOURNAL of the ASSOCIATION for SUPERVISION and CURRICULUM DEVELOPMENT, NEA

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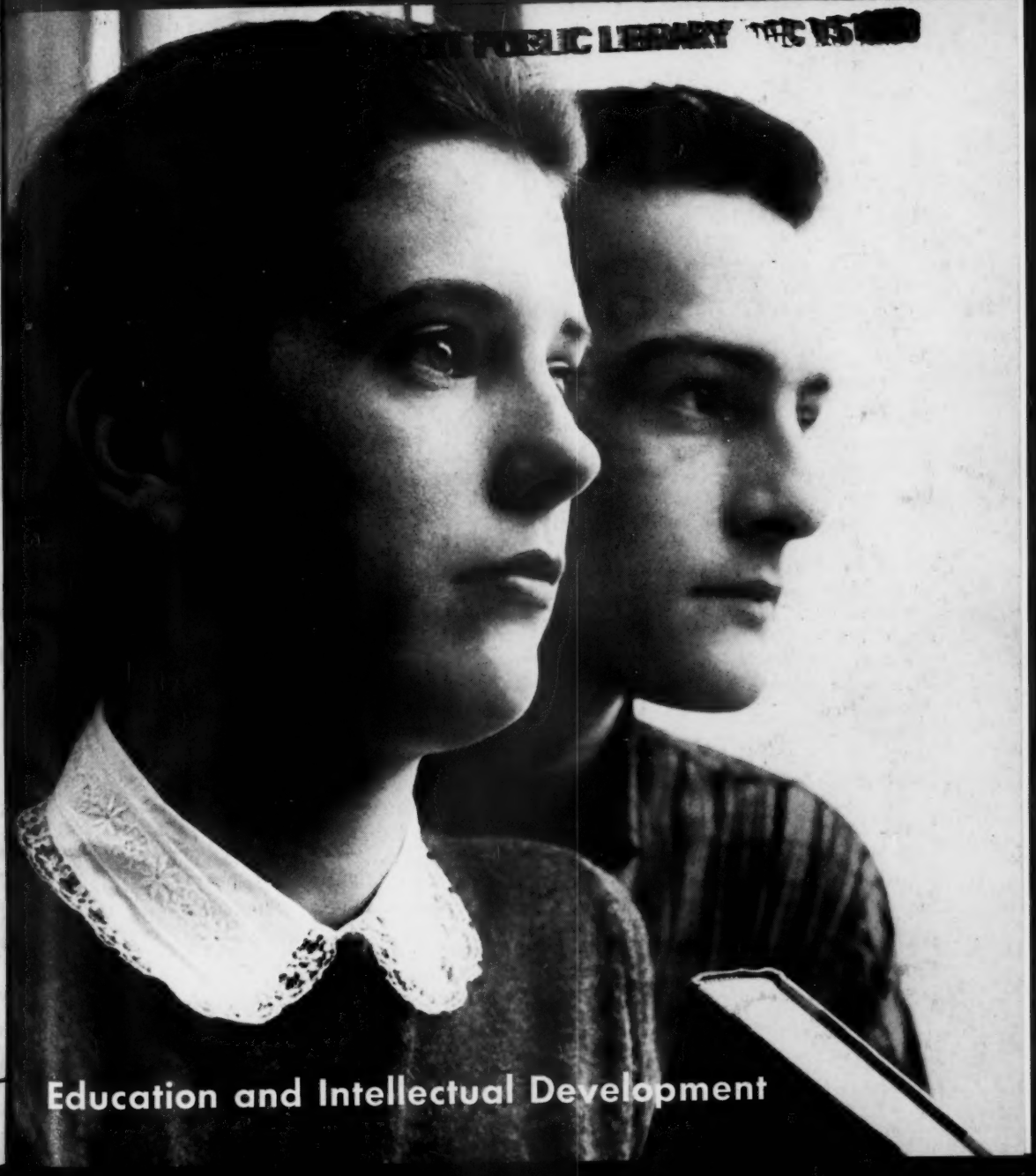

## Education and Intellectual Development

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# Editorial

## Education and Intellectual Development

One can scarcely say that those who glorify intelligence and reason in the abstract, because of their value for those who find personal satisfaction in their possession, estimate intelligence more truly than those who wish to make it the indispensable guide of intellectual and social life.[1]

THIS ISSUE attempts to relate education and intellectual development. It is a modest approach. The contributors are school people. They show clearly where they now stand. They know that they do not have all the answers, and that the few answers they do have may not be definitive. They do not look upon intellectual development as something which, once attained, is exclusive, static or final. Rather, they regard intellectual development as an on-going process, preferably begun in early life and continuing through the years.

Development of the intellect is an area about which we admittedly know little. Asked to write on this subject, we are likely to concentrate, as did several of the writers for this issue, upon the more or less "tangible" aspects of the topic, upon process, or content, or materials, or personnel. These, however, are points at which we can begin to think of this topic, and at which we, as school people, can best hope to make the kinds of practical provision which can assist intellectual development.

Our writers have something to say about the relation of process to intellectual development. So much of the hope of education lies in our placing in the hands of the pupil, at the earliest possible age, the effective tools of learning —the methods by which, through guided experiences and insightful interpretation, he can gain the knowledge and the skill of educating himself, of fostering his own intellectual growth.

Writers in this issue respect content. Their sincere hope is that the treasures of the cultural heritage will be made richly and invitingly available to all.

And what of the intangibles, the ideals, the aspirations that can illuminate and give incentive to the search for intellectual development? These, too, are part of the school's responsibility, and a part which the school must share with the home and the other institutions of the community that touch upon the lives of the young.

Much of the qualitative development of the intellect can only come about through the guidance and inspiration of people. Not just any people—rather, persons who understand and respect intelligence and the life of the mind. Are the schools now manned by such persons? Can and do the teachers and administrators inspire on the part of all children and youth a profound respect for intelligence and for the methods by which it is applied to solving the problems of life and of living?

What higher goal can there be for education than the development of a sound person with sound and disciplined intellect? These contributors are concerned, each in his own way, with the pioneering of trails to the high reaches of the human mind and spirit.

—ROBERT R. LEEPER, *editor*, EDUCATIONAL LEADERSHIP.

[1] John Dewey, *Philosophy and Civilization*. New York: Minton, Balch & Company, 1931. p. 35. Copyright 1931 by John Dewey.

ARTHUR W. FOSHAY

# Education: Some Present Needs for Future Excellence

**The times call for sober, serious, intellectually tough leadership. It is up to the schools to respond to this challenge, to give it shape and meaning, and to stand affirmatively and consistently for the things of the mind and spirit.**

ONE THING is clear about this year's crisis of confidence in the quality of public school education: the public is ready now, as it has never been before, to give serious attention to the things of the mind and of the spirit. It has dawned on many a man that he has parked his personal golden calf at the curb in front of his house. While the beep, beep, beep coming to us from space in October 1957 had an unholy origin, its effect was to remind us of the cold truth that the ultimate human power is not in our possessions, but in our minds. We can now challenge the Philistines, the materialists, the Babbitts, and expect public support. All we have to do is give expression to our ideals. There is appearing now in the mass media, for the first time ever, a respect for intellectuality that has been totally absent in the past. The evidence is all around us that the times call for sober, serious, intellectually tough leadership. And it is up to us in the schools not only to respond to this public clamor, but to give it shape and meaning; to lead the next generation of Americans forward to a civilized state of being such as we have never known.

This is the setting in which we must view the American school. If this sounds pretentious, let us remind ourselves of the central place that the public schools have in what our country may become. If we educators are not willing to take ourselves as seriously as this broad setting of our problems suggests, then let us remember that the public does take us this seriously. If we, as educational leaders, are unwilling to confront problems in the terms that the present crisis of civilization demands, then others will be found who are able and willing to confront them on this scale. Some of these others are already clamoring for the leadership of education. Some of them propose ways of operating the schools and philosophies of education that are fundamentally at variance with the American ideal.

The struggle in which we are now embroiled is as serious as it can possibly be. There is no place in educational leadership for triflers, for those who make expedience their goal, or for the silent brethren who wish to wait and see which way the wind is blowing before they declare themselves. If there was ever a time

that called for thinking on a grand scale, this is that time.

## Areas of Progress

Even a hasty consideration of the crisis we are in suggests what the schools must do. The schools must make the development of thinking more central, more deliberate than has ever been the case. As pedagogues, we have to break free from our own history in the sense that we have to weld content and method back together—we have to put together, at a level we have never attempted on a large scale, the content of education and the methods used for developing the content with growing children. In a word, we have to make the child, thinking, the object of our efforts; we have to make *thinking* a proper and main purpose of the schools. What the times demand of us, and what we should in turn demand of the times, is that we exert the authority granted to us as educators to develop further the life of the mind and of the spirit; that we become clear about the nature of American civilization and make the experiences children have in school consistent with that civilization at its best. We will not be told *how* to do these things by the public. We must continue to work this out for ourselves, maintaining contact with the public as we go. We can be thankful that we have already made some progress.

### *Improving Personnel*

What do we have to work with? First of all, we have professional people. According to a recent NEA Research Division report,[1] the general level of preparation of all elementary school teachers in service has improved for the eleventh consecutive year. Of all those in service in 38 states, Alaska, District of Columbia, Hawaii, and Puerto Rico, 71.1 percent hold the bachelor's degree and only 4.3 percent have earned fewer than 60 semester hours of college credit. Moreover, only a very small number of states will now permit teachers to enter the classroom without a bachelor's degree. In Hawaii, five years of preparation are required for either the elementary or high school standard certificate. In effect, many school districts also require a minimum of five years of college preparation before they will accept candidates for teaching positions.

Now, these are optimistic figures. It is good to know that the general education of the teaching force is likely to continue to improve during the years ahead. But it would be fatuous to assume that because the proportion of those holding degrees is increasing, the basic education of the teaching force is good enough for the task that lies ahead. Those of us who were in the teaching force in the 'twenties and 'thirties remember perfectly well that the large number of people admitted to teaching on emergency credentials in the post World War I period included entirely too many people who never improved their own educational status beyond the minimum requirements of state certification laws. Some of the difficulties encountered during the period of school experimentation in the 'thirties arose from the fact that teachers, supervisors, and administrators were not sufficiently capable of dealing with abstract ideas,

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[1] *Teacher Supply and Demand in the Public Schools.* The Eleventh National Teacher Supply and Demand Study. Washington, D. C.: Research Division, National Education Association, 1958.

and therefore tended to oversimplify complicated matters.

As a further dampener to our optimism, let us remember that the turnover of teachers is in many cases fantastically large. In one western school system, for example, 50 percent of all the elementary school teachers have been teaching for less than four years. Too much of the time of some of our most effective curriculum leaders has been spent of necessity orienting new people to the teaching profession—new people, most of whom do not stay. We hear much these days of the needs of gifted children. Of course, these needs must be met. But what of the needs of gifted teachers? If we are to do more than maintain the level we have already reached in education, we must rely on them. *Progress* in raising the quality of education has always depended on the best teachers we have—the real "pros" of the profession; those who are in it for keeps; those who have made a moral commitment to the education of children as their main lifework. Everything considered, we surely have neglected these people during recent years. Most school districts have done well to keep the classes manned and the school doors open. But there is no denying the fact that school districts all over the country have failed to provide educational leadership on the scale required both to deal with the influx of new teachers and to carry the schools forward qualitatively.

I recall a conversation I had last year with a friend who is an outstanding curriculum leader in a city school system. Remembering her pioneering work in developing a sound social studies program in the schools, I asked her what had been going on recently in this field, in her school system. She sighed and said, "Really, very little if anything. We've had to spend all our time on the new people. I honestly believe the schools were doing more 15 years ago than they are now."

***This article is based on an address by Dr. Foshay at the Annual Convention of the National Education Association, July 2, 1958, in Cleveland, Ohio; and at the ASCD Region III Workshop, August 8, 1958, in Morgantown, West Virginia.***

The education of the entering teacher is improving. However, we must not delude ourselves into supposing that the improvement is fast enough, or will occur in time to cope adequately with the crisis we are in. Mr. Micawber was not even adequate in the nineteenth century. Certainly he has no place in the ranks of educational leadership in the twentieth century. We can't wait for something "to turn up." Something turned up in October 1957.

### *Improving Materials and Methods*

Let us turn from personnel to curriculum. In my judgment, there has been one very important and favorable development during the past few years that has directly to do with what children learn in school. I refer to the great improvement in the materials of instruction. More and better materials exist right now for the teaching of children than has ever been true before. The books are better, and there are more of them. Phonograph records have improved vastly in quality. So have record-playing machines. The development of the tape recorder into a commonplace tool of learning is something brand new in the world. We have a whole generation of children in the schools now who have benefited from the tremendous impact that television has upon people. Most of us will agree that children now have more general information when

they come to school than has ever been true before. Moreover, we have reached a time when it is possible to state affirmatively what the contribution of television can be to the direct instruction of children in the schools. We can look forward hopefully to the day when all classrooms will have television sets easily available, and when there will be a steady stream of valid material available on TV in many instructional fields, and on many levels.

It is legitimate to hope that in the future the teacher will come more and more to fit the classic ideal: guide, philosopher, and friend. This will happen in direct proportion to our efforts to make an intelligent use of the resources now available, and those that will become available, as the technology of communication continues to develop. For a "guide, philosopher, and friend" is not primarily a transmitter of information; he is much more nearly a transmitter of the intellectual and spiritual processes which are the very stuff of civilization—the processes that make information meaningful.

The time may come when we will look back on today's situation with amazement, wondering how it was that anybody thought that the teacher's main job was to be, with the textbook, the repository of all learning. In a time when so much has happened to make the transmission of information easy, we may hope that the teacher's work will become more and more of a strictly teaching job; that is, that the teacher will become a supervisor of learning, someone who will work with each child in the terms he requires so that he may grow in ways that are most appropriate for him and for the society that he will enter. Of course, these things remain a dream while we appropriate the present $3.98 a year per child for textbooks, and about $1.00 a year for all other materials of instruction. If we were in earnest, the figure would be $25.00.

There is no way to build skill in thinking that doesn't involve trying to think. It is therefore encouraging to consider the fact that active methods, those which require the thoughtful participation of the student in his own learning, are more widely used in the schools now than they have ever been. This fact (for such I believe it to be) sometimes eludes us as we listen to those who wish to turn students back into repositories and parrots. As it happens, I spent the better part of a month this spring in France, sitting for hours in the classrooms of a lycée and talking at great length with teachers and administrators in French secondary education. My purpose in doing this was not to appraise French education, but rather to get some sense of where the French are headed, and to see what we might learn from them. Some things they are doing would not be appropriate in America. We have, however, much to learn from them, especially in the field of the teaching of the mother tongue. My purpose in bringing this up, however, is to call attention to the fact that they are deliberately and in a highly systematic manner introducing what they call active methods into their teaching. With characteristic French clarity, they see the defect that is inherent in the "sit still and listen" approach to teaching and learning, and they are vigorously bringing it to an end in the French schools, especially in the lycées where they educate their élite.

It is worthwhile to remember that our own introduction of active methods is associated with our attempt of a generation ago to take Dewey's "method of intelligence" as the key to effective learn-

ing. Problem solving, which might be translated into the term critical thinking, is something that teachers know a great deal about, as it is appropriate to children. With all the faults and shortcomings of our attempts to teach critical thinking to children, it remains true that American school children learn more about planning and evaluating their work than do children anywhere in the world.

This is not, of course, to say that all, or even most, school classes conform to this ideal. But if it is a minority that conforms, it certainly is a very large minority. And this is encouraging.

With these developments in materials and teaching methods has, of course, come an improvement in many schools. The best schools now are probably better than they ever were before. But the spread between the best and poorest schools in the United States is probably greater than it ever was. For while progress has been made during the years since World War II, there are a great many schools that have failed to progress. It is safe to assume that one can find examples of almost any kind of teaching that has ever been practiced on this planet, somewhere in the United States. As a people, we Americans have notoriously failed to put a qualitative floor under our educational system. At its best it rises to the level of high art. At its worst, it is very poor. Can we tolerate this kind of disparity? For me, this is a rhetorical question. We cannot tolerate it any longer. But it is going on, and the situation is becoming worse, not better. Paradoxically, the reason that it is becoming worse is that the best schools are improving faster than the worst. The gulf between them is now so deep that teachers in the best schools cannot even talk about teaching with teachers in the poorest schools. They come from different educational worlds. I say that this situation is intolerable. Some day our national professional organization is going to take the kind of vigorous action on this question that they have taken on some others. Some day, the educational equivalent of the Flexner Report will be published and the floor will be established.

## What Are Our Needs?

Let us turn from this admittedly inadequate survey of the present educational situation to consider the needs we face. Many of them are suggested by the preceding comments. Others will be known to you, though I have not touched upon them. I believe that efforts focused upon these needs would be productive. In any case, they demand even more attention than they are now receiving.

First, *we need a better teaching force than we now have.* The teacher of the future should have a general education that is not merely equal to, but clearly superior to that of the community he serves. Any teacher should be an outstandingly well-educated human being. Now, those of us who have worked directly with curriculum improvement programs know perfectly well that a sound and valid education is of itself no guarantee of qualitatively good teaching. Many well educated people cannot teach. We have to have both skill with children —a high level of professional competence —and an outstandingly well-educated individual to exercise the skill. To me, this implies that in the future, boards of education and school administrators should sit in judgment upon the bachelor's degrees now being granted by American colleges. We should no longer accept into teaching, people with inadequate collegiate education. All of the faults that

are associated with the qualitative range that I have mentioned in the public schools are also associated with the qualitative range of the American four year college. If, as I think we must, we are to put a floor under the quality of education, then we must put a floor under the quality of the general education of the teaching force.

Moreover, I do not see how it will be possible in the future for us to accept as teachers, people with less than five years of collegiate instruction, including a thoroughgoing professional preparation to teach, and an excellent general education. I repeat, however, that I do not mean just any five years, or just any college. Our need is for an average that is as good as our present best.

If we are going to conduct meaningful educational experiments in the future, especially in the field of intellectual development (and I hope that we will), then we require a majority of teachers (not a minority) who can handle the difficult ideas that will emerge from such experimentation.

People in teacher education institutions have known for a long time that it is necessary to begin the process of making a teacher at least two years, and preferably three years, before a student faces classes. This process must include from the beginning both direct experience with children, and university classes in which the student is taught how to think about this experience. It is the failure to integrate successfully the concrete and abstract aspects of teacher preparation, and the failure to take sufficient time for the process, that accounts for much of the apparently trivial content of strictly classroom education courses. Many a teacher has discovered, as I myself did, that the difficulty with the education courses that he had was that they came before experience with children. They should have come *during* experience with children. These courses are frankly theoretical. The function of theory is to clarify reality—no reality, no clarification; no reality, no function for theory.

But the making of a teacher does not stop with college. As things stand, the in-service education of new teachers is carried on through quickie orientation experiences conducted by the school system, plus the unofficial but potent influence of "the teacher down the hall." The lack of articulation between collegiate preservice professional education and on-the-job reality is a notorious and glaring weakness in our present practice. The solution is obvious and simple. We need to add to the preservice education a two-year period of on-the-job continued joint effort by colleges and school systems. The orientation of new teachers is properly the concern of both. Until we recognize the need for a systematic internship program during these two probationary years, we cannot hope for the dramatic improvement in the quality of education that is required.

In-service education is a lifelong affair. It is not now, nor should it be, restricted to matters of direct professional concern. The continued general education of the teacher is as much the concern of the board of education as continued professional education. Each should be offered in its own terms. There is no reason why professors of chemistry, history, and English should not be carrying part of the load of the adult education of teachers, provided they are asked to do what they can do well—to teach adults their disciplines.

At its best, professional in-service training has long since passed the level at which 8,000 teachers are herded into

an auditorium on the day before Thanksgiving to hear an entertaining professional lecturer talk about his trip through the Amazonian jungle. Ten years of experience with action research have demonstrated that classroom teachers can think about professional problems at a level far above that usually permitted them. All our efforts to get better people into teaching and keep them will be meaningless if professional in-service work inhibits their growth. There is no question in my mind but that some educational leaders, in their desire to be practical, clamp an intellectual lid on the development of education in the schools.

Second, *we need better teacher education than we have had in the past.* Better, and more of it. I have referred to the need for a four- or five-year period of pre- and in-service education, to be carried on jointly by colleges and school systems, and I shall not dwell further on this need. On the college campus it will be necessary for schools and departments of education to become more selective of those who are admitted to teacher education programs. The pressure to produce larger numbers of teachers has been so heavy that such departments have tended to accept and put through too many mediocre students, rejecting from teaching only the most obviously ill-qualified people. There is no denying that schools and departments of education often have a poor campus reputation. This fact has to be analyzed for its real meaning. I have already touched on one reason for this reputation—that the intellectually tough content of courses in education does not receive its due in the classes, and that too much abstract material is allowed to remain unrelated to educational reality. I wish to consider two other aspects of the problem.

One of these arises from the tendency of some education professors to forget that they are dealing with future teachers, rather than with future educational theorists. If, as a member of an education department, you listen to professors of other departments and try to become "respectable" according to their rules, you are lost. There is a place in education for scholarship, but the rules of evidence as between education on the one hand, and disciplines like history, literature, and biology on the other, are quite different. The educationist who tries to behave like a conventional academician is mistaken; in the degree that he succeeds in acting this way, he is neither educationist nor academician. So the first problem a professor of education has to solve is, "Who am I?" He has to answer this in his own terms, not someone else's. That is, he has to be an educator, not a stray.[2]

Next, let us consider that aspect of the problem of the reputation of teacher education that has to do with the criticism from other departments. Some members of other departments of a university criticize education because it does not make adequate intellectual demands on its students. There is some reason for this criticism, as I have already indicated. But there is another aspect to the criticism that has fooled many people, including some college administrators.

They have been fooled by a campus feud which has to do with a legitimate question, but has next to nothing to do with professional education as such. The legitimate question is, what is the place of the arts in the general education of the college student? There is a quiet, ancient war going on between the professors of disciplines like literature, philosophy, and history and the professors

[2] I have developed this point further in an article, "The Need for a Discipline of Education," *Educational Research Bulletin* 36:159-66, May 8, 1957.

of disciplines like physics, mathematics, engineering, and life sciences that turns on this question. The professors in these latter fields tend to doubt the value of prolonged programs in the arts, and many of their students actively rebel. But professors of the arts know that the contribution of the arts to civilization is profound and all-pervasive, and are furious that the question of their value should even be raised. Now, we need not deal with the question here; my bias is probably already apparent, in any case. My point is that much of this argument has been focused on teacher education, as if it were a central point at which the issues could be settled. There are those who would reduce the amount of professional education in order that the teacher might have more time for general education. This is a footless demand; it has nearly nothing to do with the real issues; it is a proper concern of professors of education that college students be well educated, but they are in no position either to know the issues in depth nor to deal with them effectively. The argument, in short, is being conducted in the wrong place, directed at the wrong people, in terms of the wrong issues. It is time that those who haunt Academe face one another in the open.

Third, *we need a coherent theory of learning.* Such a theory does not exist at present, according to the psychologists who are directly involved in studies of learning. In 1942, at the time of the publication of the National Society for the Study of Education yearbook, *The Psychology of Learning,* it looked as if a reconciliation among the various learning theories then current was about to take place. This has not happened—not because the reconciliation was not attempted, and not because of any fault among the psychologists. What has happened instead is that theories have continued to multiply, each as intriguing as the last, each susceptible to experimental tests, each potentially important to the practicing teacher. I can no longer tolerate casual references by educators to "what we know about learning." What is known is quite complicated, and much remains to be discovered. However, there are of course some fundamentals that have withstood the test of time and application, and we should obviously make use of them. But they do not amount to a coherent theory of learning. "What we know about learning" can be summarized in brief statements, such as these: (a) Learning involves the whole of the organism that is learning; (b) The emotional component of the learning situation is often as significant as the overt or apparent thing being learned; (c) You learn what you do, and the basic approach to the evaluation of learning, therefore, involves a study of the learner's response, taken as a whole; (d) Learning is a highly selective process—the learner inevitably selects from among all that is presented to him that which he considers to be relevant to his personal goal. That is why so much of what is presented in school is forgotten; (e) People learn at different rates; they learn with different perceptions of what is important; they develop highly individualistic configurations out of identical stimuli.

Perhaps you would care to add other generalizations to this brief list. My point in bringing it up is to emphasize the fact that the ideas are complicated, and that application is not always obvious. In any case, there is no comprehensive theory now in existence that takes into account all of the phenomena that anyone would recognize as belonging under "learning."

There is another development in the

field of psychology to which we should be paying attention. Somehow the studies of the psychology of the elementary school subjects have diminished greatly in number during the past 20 years. A great deal of what we are now using in fields like arithmetic and reading has been developed out of studies that are now more than a generation old. The studies have not been verified during recent years, and the field as a whole has not been extended. It lies within our power as public school educators to bring about a resumption of the study of the psychology of school subjects. All we really have to do is to call for such studies, and they will be made. If we will indicate that we are receptive there are excellent researchers who will go on with the work. Perhaps, again, we can look to France for encouragement. While the volume of educational research in France is not comparable with the volume here, there have been some very interesting experiments conducted in the field of the learning of school subjects. I refer specifically, for example, to the 1953 study of Mialaret [3] in the field of elementary school arithmetic. Mialaret has made some findings about the basic vocabulary of proportion and quantitative relationships among small children to which we should be paying attention.

We should turn to our colleagues in psychology and ask that they accelerate the development of a theory of learning that we can employ. The very complexity of their work sometimes makes them forget that they are socially responsible in the sense that we in education can scarcely wait for their findings. We have to act, even though our knowledge (and they are the source of much of our knowledge in principle) is inadequate. They have to talk to us, as well as to one another, but we have to listen. We also have to talk back.

Fourth, *we have to make the statement of our educational goals consistent with the ideals we hold as individuals and as a people.* We are part of an enormous institution. Like all institutions, the public schools have their own internal needs. One of these is that students move through the years of schooling smoothly, with a minimum of disturbance to the institution itself. This purely institutional need leads to a certain amount of insensitivity to the needs of the individual child—for example, to his need to grow at his own rate. Moreover, this need for institutional orderliness provides those at the later stages of school life with a convenient way of pressing their needs on those at the earlier stages. The college entrance examiner is having a more and more profound effect on the secondary school curriculum, since he doesn't have to bother his head about the problems of mass education. Some secondary schools are putting similarly narrowly conceived pressures on the elementary schools. If we don't watch out, we will become so busy meeting the needs of our educational *system* that we will forget about our society and our culture. It is necessary, but by no means sufficient, to prepare the student in elementary school for what is coming next in the schools. If we ever lose sight of the fact that we are preparing students, not only for schools but also for effective participation in our American civilization, our schools will at that time be drained of their vital substance.

What we are trying to help produce is not simply a student, but a man. If we

[3] G. Mialaret. Recherches préliminaires à la pédagogie du calcul à l'école primaire. *Cahiers de Pédagogie Expérimentale et de Psychologie de L'Enfant,* Nouvelle Serie No. 9. Génève, Switzerland: L'Institut des Sciences de L'Education de l'Université de Génève.

don't know what kind of a man we are trying to produce, we are lost. Here, again, the French have something to say to us. The general purpose of French public education is to produce a civilized individual. And the French know perfectly well what they mean by the words "civilized" and "individual." I wish we had equal clarity in this regard. Whatever their record in the field of politics, the French have never failed to produce great individuals. If we are ever to do as well, we will have to decide on what we think it signifies to be a man in the United States. It seems to me that there are some things that we can say immediately on this great theme, and that we should busily be saying them to one another and to the public.

For one thing, a man is a rational being. He has a mind. He can think. Evidence is accumulating that we have underestimated the ability of little children to think in schools all over the world, and in particular in our own schools. In Ohio, 30 years ago, Josephine McLatchy demonstrated that children entering kindergarten know a good deal of arithmetic. They are able to handle, in their own terms, concepts that are not presented in the official school program until they are in the fourth or fifth grades. If we think that a man has a mind, and that a mind is something one develops through use, then we ought to be saying to ourselves and to the public that we mean that the schools in future shall teach people to think, not merely to memorize. One has to have information to think, but it is perfectly possible to have lots of information and not think.

Moreover, our American man is a person who believes in the validity of action. We, more than most people in the world, believe that action is a significant form of being. We do not hold up as our ideal the man who merely contemplates. We value the tangible and concrete; we do not begin by rejecting it. That is why, in speaking to the public about what the goals of the school are, we should be making the point that the specifically American version of what it means to be a human being involves not only a respect for the way things are, but the development of the ability to deal with them as they come, and a tendency to value change.

As Americans, we believe deeply in the right of every individual to progress in life according to his will, as well as according to someone else's judgment of his talents. That is why in the schools we favor continuous promotion processes, rather than a system of cold, official selection points such as is characteristic of public education in the rest of the world. We believe in self-selection and in self-development. If we didn't, the phenomenon of social mobility would not exist. As Americans, we do not believe that a man should "keep his place." If we did, we would set up a school system in which the main function was to assign every man a place and tell him how to keep it. We don't do this; our schools exist to show people the possibilities, not the "places." But my main point is that we should learn to talk to the public about the public goals of American civilization, and not fall into the convenient trap of talking to the public about what are essentially institutional problems, such as the preparation of a child at each stage for the next. I do not mean to imply that preparation for the next stage is not important; I simply mean to assert here that preparation of this kind offers an utterly insufficient criterion for deciding what the curriculum of the school should become.

Fifth, *we need to make the quality of*

*education a passion.* As teachers, we have to resist the tendency to substitute organizational schemes for curriculum study in the schools. We have to resist the tendency to separate the theoretical from the practical. We have to recognize the *child learning* as the object of education, to quote my friend, Roy Pearce, of the English Department at Ohio State University. It is we, not others, who should be calling for a qualitatively better educational system than we now have—no matter how good it already is. Nobody knows better than the serious educator that at its best a school is never as good as it might be, or even as good as it ought to be. We, not others, are the people who ought to be demanding of the public that they support what is best and most important about life. We, not others, should be in the vanguard of those resisting our national tendencies toward materialism.

In other words, as we come to the sixth of the needs as I see them, *we should resume leadership in the American population in those things that pertain to the mind and to the spirit.* We should declare candidly the way things ought to be, and bring to an end our tendency to settle for the way things are. Our function is not to "give the lady what she wants," but to give her—and her school child—what they *ought to have.* As practical school people, we are constantly faced with the problem of taking something as it is given to us and making the best of it. And the ideal of making the best of what we are given to work with has carried us a very long way. We are really good at it. I do not propose that we abandon this practice—that would be nonsense. What I am proposing is that we never cease, while dealing with things the way they are, to declare the way things ought to be. How should things be in your own community? Let me name a few instances where a school teacher should be taking leadership.

First, do you have a really adequate public library? It continues to be astonishing to me that communities fail to provide books, but demand learning.

Second, and in the same connection, do your children have books at home? Do they have a place to study? Do their parents offer them the kind of stimulating environment that encourages the development of a mind? Of course, many parents can't afford to provide the physical equipment that goes with this sort of thing, but all parents can provide the stimulation if they mean to.

Third, does the school reflect the needs of the future or the needs of the past? Are the resources for learning really present? If they are present, are they really being used? Are faculty meetings being devoted to education, or to organizational detail?

Fourth, are we being candid in our own communities about the dearth of cultural opportunities presented? Do we speak up, or are we mute, when, as happened in one Ohio community, the local symphony orchestra was left to flounder financially while the businessmen gathered more than $100,000 to support the local professional baseball team?

Fifth, what are we saying to the local newspaper publisher about his coverage of educational events? I don't mean, now, "puffs" about the public schools and how wonderful they are. What I mean is the coverage as news of the serious cultural events in the community; the good writing, the sculpture and painting, the musical performances, the architecture.

This sort of approach could be extended, of course. We refer here to the role of the teacher as a citizen. As teachers we are most effective and most power-

ful in our communities when we are truest to what we deeply believe. There is no one who believes in education the way teachers believe in it. There is no group in the community, except the clergy, which has more thoroughly committed itself to the pursuit of a truly lofty set of ideals. As citizens we should stop standing, hat in hand, begging for the public's attention to the external needs of the school. We should put our hats on, and play our proper public role as those people in the community who most affirmatively and most consistently stand for the things of the mind and spirit. In so doing, we will be carrying forward the profession of education, contributing to the solution of our deepest public problems, and responding to the spirit of these times.

## Consider Your Feet

O.K., lie there and consider your feet.
But I ask you

Will you be a light? gifted? effectual?
If so, bombastic or shy intellectual?
Will your teacher delight in you?
Be high in her praise of you?
Discern you are bright
As she gropes through the maze of you?

All right, your hands are the wonder of the universe.
But I give you

Round, red apples; colored balloons;
High-flying kites with ribbon festoons;
The concept of one; number the blocks;
Run, Spot, run; put hands on the clocks;
Hold hands with your buddy; sit still; don't speak;
Color arms and legs orange; don't let the chalk squeak.

Now you know you can't get your whole fist in your mouth.
And later on

Square roots, quantum, stress and traction;
Underlying motivations of thought and action;
Heroes of revolution as despots go tumbling and rot;
*Beowulf* in Old English, the courtly battles of Scott;
The mystery of the heavens; comment allez-vous; and lots more;
An innocent pawn in the various programs of group, track and core.

Yes, I know you're wet and hungry, but can't you wait ONE minute?
I need to know

What of us, your father and I? Keep up, they say. Oh, fine.
A pity the answer so blithely given doesn't come with a ration of time.
Right now your world is all in a bottle (four Mullsoy, four water—eight ounces).
But outside the window, the worldly-wise say a nation readies, waits, pounces.
To find the strength to promise you peace beyond the sides of your playpen
Is an uneasy search when, for an example, we must use a world verging on mayhem.

—Evelyn M. Ford, ASCD Staff.

CLARENCE FIELSTRA

# Developing Openness for New Experience

**Knowledge, abilities and attitudes conducive to openness for new experience are essential to men's confidence in the world of tomorrow and competence to live as constructive and responsible persons in that world.**

THE GREATEST certainty of this age is change. The speed and extent of change are increasing more rapidly each decade and each year. The "impossible" and the "unanticipated" of 1900 have become the "commonplace" in 1958. Man now takes for granted his ability to hear, via radio, voices from remote parts of his planet; by means of television he sees, even in color, persons and objects thousands of miles away; by jet-propelled plane he crosses continents and oceans in scant hours; he uses mechanical brains to speed up and perfect his computation; automation is being substituted for his brawn in handling countless tasks; and nuclear fusion and fission are sources of almost limitless energy now available to him.

The developments of the past half century will, however, in all probability be greatly overshadowed by those which will take place during the lives of boys and girls who are now pupils in our schools. Interplanetary travel, further conquest of disease, and great social advances are among the many changes which are anticipated; but there is no way of predicting innumerable other, and possibly more dramatic, changes which may be achieved. Barring world war or some other catastrophe, the pace of change in the foreseeable future will continue to accelerate, and the extent of change will be magnified.

## Educating for an Age of Rapid Change

In such an age of rapid and far-reaching change, the function of education cannot consist merely of passing on the cultural heritage to each new generation. Nor can it consist only of teaching children and youth about the social and economic *status quo*. If these functions were sufficient, the job of the schools would be relatively easy. It would then be quite appropriate to be satisfied with an historical study of the past and an analytical study of the present as the curriculum for all pupils. Such studies will continue to be imperative, of course, but now they must be made in terms of perpetually changing conditions and in terms of an unforeseen future.

A continued emphasis on knowledge

must be supplemented by an increased emphasis on attitudes, values and skills for constructive living in a changing environment. The scientific attitudes, for example, must be stressed as never before, so that our youth will more than ever challenge so-called facts, withhold judgments until all new data are considered, and modify conclusions when data warrant doing so. Values, based on the Magna Carta, on the Declaration of Independence, on the Constitution of the United States, and on many other great political and religious documents, must be extended so that they may be applied to an ever-increasing number of human beings throughout the entire world. Improved skills of human relationship must be learned, enabling man to live with man and nation with nation in such a way as to elevate the standard of living for all men everywhere and in such a way as to eliminate war and all other indignities of one to another as means of coping with problems.

The curriculum of the schools today, then, must be such as to foster adaptability and to provide experiences in creativity on the part of all pupils. Each child must learn how to think critically and how to continue his further learning on a life-long basis. Among the most basic skills which he must develop are those involved in solving problems and in making rational decisions; memorized answers to past and present problems are not enough. He must learn to develop new generalizations and to see new Gestalts or configurations based on new data. He must learn how to use his creativity and his inventiveness not only to facilitate adaptation to change but also to push the frontiers of change even farther in the interests of the welfare of mankind.

In a curriculum designed to help pupils achieve these goals, the learner should not be treated as a blotter absorbing that knowledge which is spilled thereon or as a vessel to be filled with information poured therein. He must be a dynamic participant in the learning process. He must be involved in the planning of his learning activities, so that he may know from successful experiences how to plan them in his living outside of school. He must carry on many of the learning activities in cooperation with other pupils, so that he will gain facility in working with his peers on matters of common interest. He must take part in evaluating his activities and their outcomes, so that he will develop the habit of continuous evaluation.

The curriculum for an age of rapid change must also help pupils learn to assume responsibility for the results of their actions. Not only must they learn how to make rational decisions, but also they must learn to be accountable for the outcomes of their decisions. The school must provide pupils with opportunities to become acquainted with known alternatives, and it should help them develop scientific attitudes toward seeking still other alternatives. It should help provide knowledge of the potential consequences of each alternative, and it should provide curricular experiences which will enable pupils to learn to make the most of those consequences which result from the alternative chosen. Such learnings cannot come alone from the reading of books or from the listening to lectures given by teachers and parents; they must be based on actual experiences in choice making and in assuming responsibility for results of actions.

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If "answers" to issues are imposed upon pupils and if choices between alternative actions are forced upon them, there can be little assurance that real learning has taken place—the kind of learning that is carried over into life outside of the influence of the "imposer" and the "enforcer." But if the pupil is genuinely involved as an active, thinking, responsible participant in finding best answers and in making wise choices and decisions—under the guidance and inspiration of a competent, mature teacher—the answers and choices will become his own, as will methodology for subsequent wise decision making on his part.

## Keeping Balance in the Curriculum

In order to educate pupils appropriately for an age of rapid change, a well-rounded and well-balanced curriculum must be provided. Every pupil should acquire as excellent a general education as his ability will permit, so that he may have a firm foundation not only for good everyday living and effective citizenship in a democracy but also for whatever specialization in the use of his talents he may be capable of in the sciences, the humanities, and the arts. In addition, each pupil should acquire specialized education in line with his particular abilities and probable future occupation.

On the secondary school level even the specialized education should, of course, be foundational in nature for those who go on to college to further specialization; but for pupils lacking the academic ability to benefit from college work, specialization to the point of employability upon termination of secondary education should be afforded. Care must be taken to avoid yielding to temptation to make the educational program for any child one which is overly much concerned with specialization while neglecting the so-called common learnings requisite for satisfying and successful living. It would indeed be unfortunate if individuals were to be encouraged to know more and more about less and less until they knew almost everything about almost nothing and knew almost nothing about almost everything else.

In addition to a balance between general and specialized education and a balance among the sciences, the humanities, and the arts in the total school program, there must be a balance among the following elements of the over-all curricular goals: knowledges, skills, and attitudes. The development of any of these elements at the expense of the others may lead to serious difficulties. The person, for instance, who has much knowledge of facts and has highly developed skills without having a sound system of ethical values, may be a real menace to society. Similarly, a zealot who is dedicated, as was Hitler, to emotionalized values not based on scientifically substantiated facts may be instrumental in the destruction of mankind. And the highly competent "stinker" can be every bit as dangerous in the professions, for example, as the uninformed man of good will and integrity. What is needed, then, is the balanced development of these curricular goals to the greatest extent of each learner's ability to achieve them.

## Developing Attitudes of Openness

If children and youth in the schools today are to face intelligently and confidently the changes, some of which are just becoming evident to us but which will be the full realities of the world of tomorrow, they need not only the kinds of understandings and abilities mentioned earlier but also the kinds of at-

titudes which are conducive to openness for new experience. Since attitudes and values to a very large extent determine what one does with what one knows, the importance of these attitudes can hardly be overestimated.

Among the most influential factors in the development of these attitudes are the characteristics and behaviors of the teacher. The example set by the teacher is widely recognized as being of much influence on his pupils' attitudes. If he himself has an experimental approach to problems, evidences scientific attitudes, shows eagerness for further learning, and demonstrates confidence in facing a future of progressive change, his pupils will benefit from his inspiration and tend to reflect his attitudes regarding new experiences.

The teacher's conduct toward his pupils is another factor of tremendous influence on their attitudes. If he shows respect for their human dignity, interest in their progress, understanding and helpfulness regarding their difficulties, appreciation for their best efforts, enthusiasm for their creative endeavors, and sincere enjoyment of working with them, he is providing a learning environment in which pupils are most likely to develop wholesome self-concepts and to work, free from fear, to the best of their abilities in the pursuit of educational goals. As a result of faith developed in themselves, such boys and girls actually look forward to new experiences and genuinely enjoy them as they unfold.

Teaching techniques used by an instructor are similarly of immeasurable influence on the development of pupil attitudes toward new experiences. If the techniques are highly motivational and if pupils have purpose and meaning as an integral part of every learning experience, they are most likely to gain an eagerness to learn new facts and to perfect new abilities. If diagnosis and evaluation are continuous, as learning activities are undertaken and carried on to successful completion, pupils are more certain to achieve a sense of direction and growth which is essential to high morale and to desire for further hard work on educational objectives; also, through participating in such evaluation of their own work, they learn to benefit from mistakes as well as to capitalize on successes. If individualized pupil efforts are supplemented by effective group learning activities and by wise use of the community as a learning laboratory, pupils tend to develop an enthusiasm for democratic processes and for taking part in the enrichment of their society.

If free American democracy is to survive in the ever changing world of tomorrow, education must be designed to develop men who can perpetuate it under those conditions. Such men choose their own leadership and participate in policy decision-making. They are men who are able to express conflicting points of view and to examine them critically. To them frontiers appear as challenges rather than obstacles to further progress. They demand freedom to preserve their gains, to explore the unknown, to create a better world, to serve their fellow men, and thus also to achieve the full, good life for themselves. Education for this kind of freedom cannot be founded on a system which requires the mere acquisition of the facts and skills and concepts of yesteryear. Much more than that is needed.

Knowledge, abilities and attitudes conducive to openness for new experience are essential to men's confidence in the world of tomorrow and competence to live as constructive and responsible persons in that world.

HARRY W. SARTAIN

# How Children and Youth Learn To Study

**Out of sound research findings are drawn several principles to guide teachers in helping children and youth learn to study.**

THE instructional leader is faced with many kinds of problems. Some of these relate to complaints of teachers and parents about inefficient study habits of students, assignment of homework, pressures for expanding the curriculum, and attempts to take teaching shortcuts such as TV classes. In order to reach intelligent decisions on these matters, he must be somewhat familiar with the research on how children and youth learn to study.

## What Are the Research Findings?

The earlier investigations centered on methods of supervising study (3), but Brownell (5) demonstrated the need for defining study skills objectives in terms of necessary abilities and work habits.

Outlining is a skill which has been given much attention in the research. Barton (15:134), working with five experimental and five control groups of junior and senior high school pupils, found that those who were taught to outline gained significantly more knowledge in history and in geography. Salisbury (11) experimented with matched pairs of secondary school students who received 30 lessons involving outlining. She concluded that development of outlining skill resulted in improvement of reading, ability to solve reasoning problems, and achievement in content fields. Studies by Simpson (12) and others have tended to support findings favoring outlining as a study skill.

Summarizing is another practice which has been found to be valuable. This may take the form of a written summary or of mental review. Newlun (5) observed that students who were taught to summarize were able to utilize this skill successfully as a study aid. Summarizing, outlining, underlining, and note taking were found by Dynes (7:357) to help children achieve better in high school history than reading and rereading. Another study by Germane (15:26) showed rereading to be a less effective study procedure than the mental summary and the corrected summary.

Closely related to the skill of mental summary is the habit of recitation after reading. Gates (7:316) concluded that both meaningful and nonsense material

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PHOTO BY D. LOZINSKI, ROSEVILLE A-V DEPT.

***The teacher insures good study habits through skillful guidance.***

were better memorized if the learner recited the main points to himself, with constant self correction, after reading it. Forlano (7:317) compared the same type of recitation method with the all reading method for learning intermediate grades spelling, arithmetic facts, and vocabulary material; he found the recitation method superior to the reading method and it was even more successful for delayed recall than for immediate recall.

The value of repetition and of spaced repetition in the study of material to be memorized was investigated as early as 1885 by Ebbinghaus (7:301) and more recently by Reed, Hahn and Thorndike (7:303), and others. Repetition is most efficient when arranged in a number of relatively short periods which are distributed with rest between. The optimum length of each drill session depends upon the age of the learner and the type of content being studied.

Various pieces of research indicate that little learning takes place unless it has meaning for the student; consequently, an overview or preliminary skimming of material to be learned is recommended as a means of helping the student to understand better the relationships of the specific facts that are to be studied. For the same reason the whole-part-whole method or the progressive part method are recommended for memoriter learning (7:315).

The value of extensive reading as compared to intensive reading in textbook materials was reported in two studies by

Cohen (4) and by Rice (10). Cohen found that extensive reading was the more useful in improving specific reading skills, and Rice revealed that extensive reading was definitely more effective in the acquirement of scientific knowledge in several high school science courses.

Probably motivation is the most significant factor in the development of good work habits. A series of well-planned studies which were recently reported by Brown, Abels, and Iscoe (2) indicated that low scholarship college students were not necessarily lower in intelligence than better scholars, but they revealed a much lower level of interest and motivation both in class-related activity and in some other areas of living. An older experiment by Collings (6:73) showed the value of activities combining motivation and meaning. Rural school pupils aged six through fourteen years participated in real-life study projects for four years; their gains in achievement on standardized tests of facts and skills were considerably better than those of children in a control school of the traditional type. Also, the values of topical unit teaching including dramatization, group discussions, audio-visual experiences, and numerous other learning activities at the junior high school level, have been illustrated (7:356).

All of the evidence indicates that students learn best when they are actively involved and when the work is suited to individual needs. Therefore, radio and television can never replace the teacher,

***A classroom library corner can help improve study skills in the elementary school.***

PHOTO BY D. LOZINSKI, ROSEVILLE A-V DEPT.

who must diagnose pupils' difficulties and adjust instruction to individuals. Television programs that are merely illustrated lectures require only passive involvement by the pupils, and cannot have the educational value of classroom and laboratory projects in which students are personally engaged. However, radio and television programs do have tremendous worth when used as supplementary resource materials.

Several research projects have been undertaken to ascertain the necessity of giving students training in the use of study skills. In an investigation that was rigorously designed and executed, Stordahl and Christensen (13) compared the learnings of Air Force trainees who had been given no study skills instruction with others who had been taught to employ underlining, outlining, and summarizing. Those who were trained to use the study skills achieved significantly higher comprehension on both immediate and delayed tests than did those who simply read and reread the assigned pages. Somewhat similar results have been obtained by other researchers (5, 12). McCallister (5) and others have shown that there is a significant difference in the reading-study skills used in various subjects, also.

There have been several analyses of the differences between study habits of high and low achievers (7:358). These have usually revealed that the better students plan systematically, study alone, work in a place having no distractions, and practice the procedures of overviewing, reviewing, outlining, summarizing, note taking, and demanding understanding during careful study.

A number of experiments have focused on homework as a study aid. Some investigators reach conclusions very favorable to homework, while others obtain opposite results (9; 14:20). Although more research is needed, it now seems apparent that traditional types of homework often do not improve achievement, but some of the newer procedures have value when used wisely. A recent survey of opinions of school superintendents across the nation revealed that the majority did not recommend homework in the lower elementary school, but they did favor it above that level; median suggestions were three hours weekly for upper elementary grades and four to six hours weekly for secondary students (8).

## What Principles Evolve?

From the research and a survey of expert opinion nine guiding principles for fruitful instruction evolve. These principles apply in differing degrees to development of study skills and habits from kindergarten through college.

1. *Readiness is a prerequisite of productive study.* The teacher must determine whether children have the ability to master new concepts; and he should make sure that the underlying understandings have been developed. New vocabulary that is used in the material should be presented by the teacher of the subject involved. Also, the student must feel that he is a reasonably secure member of a group before he can study effectively in that group situation.

2. *Motivation is crucial.* The teacher who follows the recommended mechanics of lesson presentation but who fails to interest and inspire the children, is a pedagogical dud. Classroom activities should be fitted to the natural interests of the children, but new interests must be created, too. The teacher's personal enthusiasm coupled with challenging learning goals make the difference between a monotonous course and an invigorating study situation.

3. *Students learn to study by participating in the planning.* Obviously the learning experiences cannot be truly meaningful to the students if they have had no voice in the planning. After the teacher has thoroughly surveyed the resources for the unit which is to be taught and has provided a stimulating introduction, he should discuss with the students: (a) What more do we want to learn about this topic? (b) Where can we find this information? (c) What use do we want to make of this knowledge immediately in school projects and in our daily living?

4. *Good study habits are developed when the students are actively involved in extensive unit work, laboratory experiences, etc.* Skills and understandings are learned and retained when students have immediate use for them and when they are related in a pattern of other learnings.

5. *All available resources should be utilized in the search for facts.* Children and youth must be guided in utilizing classroom references, library materials, radio and TV programs, community functions, resource people, etc., in order to develop the habit of seeking *all* available information before reaching conclusions.

6. *Students should be given definite instruction at the appropriate developmental levels in a number of specific study skills and habits including the following*:

a. Study with specific purposes or problems in mind, whether reading, listening, or viewing.

b. Demand understanding when reading; make this the appropriate type of understanding for the purpose—evaluative, detailed, general, predictive.

c. Differentiate the speed of reading in accordance with the purpose and the type of material.

d. Obtain a "whole view" of the selection to be studied by a preliminary skimming, reading of section headings, or other overview techniques.

e. Refine the material to its most significant points by outlining, underlining, or summarizing.

f. Insure retention by reflective repetition, review, self-testing followed by correction, or by practical application. The first review should come soon after the initial study with subsequent reviews distributed progressively further apart.

g. Space the periods of study in the manner that seems most productive for the type of material; rest when fatigued.

h. Learn to read the quantitative data, maps, diagrams, and tabular sections which add to the clarity of a presentation.

i. Utilize the index, the table of contents, the card catalog, reference books, and audio-visual aids that help to extend one's understanding.

j. Study at scheduled times in places that are conducive to work—reasonably quiet, convenient, private—and work alone during the major part of the time.

7. *Study skills are learned best when they are learned in connection with the subject or situation where they are used.* Although separate units on how to study are helpful to older students, the most effective learning is related to direct application.

8. *Judicious use of homework may strengthen study abilities, if the homework* (9):

—has been an outgrowth of well-explained and highly motivated class activity

—involves finding and preparing materials, viewing TV programs, participating in family and community activi-

ties, observing natural phenomena, and having other firsthand experiences

—is reasonable in time requirement, i.e., two or three hours weekly in intermediate grades and four to twelve hours in secondary schools

—is flexibly scheduled to cover a number of days or weeks

—is differentiated to suit various interests and abilities

—is partly voluntary and partly required

—is used to extend rather than to replace thorough classroom instruction.

9. *Deficiencies in study skills and habits can be diagnosed and remedial steps should be taken.* Suitable diagnostic methods include careful observation of work habits, analysis of the work product, individual interviews, and administration of work-study tests that are available.

In conclusion, research findings tell a great deal about how children and youth learn to study. The teacher who is well acquainted with this research will not be carried away by the whims of the public or by the fads of the moment. Students should be given a thorough grounding in the science of study. However, it is the artistry of the master teacher, the ability to develop enthusiasm and insight, that has the greatest effect on the study habits of the learner.

## References


1. Brink, William G. *Directing Study Activities in Secondary Schools.* Garden City: Doubleday, 1937. 738 p.

2. Brown, William F., Norman Abels and Ira Iscoe. "Motivational Differences Between High and Low Scholarship College Students." *Journal of Educational Psychology* 45:215-22, April 1954.

3. Burton, William H. Chapter IV. *Learning and Instruction.* 49th Yearbook, Part I. National Society for the Study of Education. Chicago: University of Chicago Press, 1950.

4. Cohen, Louis. "A Comparison of the Value of Extensive and Intensive Reading in Improving Reading Ability in an Occupational School." *Baltimore Bulletin of Education* 14:60-62, October 1936.

5. Flemming, Cecile W., and Walter I. Monroe. "Directing Study." *Encyclopedia of Educational Research.* New York: The Macmillan Company, 1950.

6. Goodykoontz, Bess. Chapter V. *The Community School.* 52nd Yearbook, Part II. National Society for the Study of Education. Chicago: The University of Chicago Press, 1953.

7. Kingsley, Howard L. *The Nature and Conditions of Learning.* New York: Prentice-Hall, 1946. 579 p.

8. *Nation's Schools* 6:51, March 1958.

9. Research Division, National Education Association. *Homework,* a paper published January 1958. 12 p.

10. Rice, R. S. "Extensive Reading versus Intensive Textbook Study as a Means of Acquiring a Knowledge of Scientific Facts and Principles." *Journal of Experimental Education* 4:376-402, June 1936.

11. Salisbury, Rachel. "Some Effects of Training in Outlining." *English Journal* 24:111-16, February 1935.

12. Simpson, Robert G. "The Effect of Specific Training on Ability to Read Historical Materials." *Journal of Educational Research* 20:343-51, December 1929.

13. Stordahl, Kalmer E., and Clifford M. Christensen. "The Effect of Study Techniques on Comprehension and Retention." *Journal of Educational Research* 49:561-70, April 1956.

14. Strang, Ruth. *Guided Study and Homework.* What Research Says to the Teacher, No. 8. Washington, D. C.: National Education Association, 1955. 33 p.

15. Woodring, Maxie N., and Cecile White Flemming. *Directing Study of High-School Pupils.* New York: Teachers College, Columbia University, 1935. 254 p.

HAROLD G. SHANE

# The Strength of American Public Education

**Facts concerning academic achievement indicate the success of America's experiment in extending educational opportunity to all children and young people.**

ONE OF THE ironies of our present era is the fact that American public education has been subjected to its most severe criticism during a period in which the schools have been making some of their most important and effective contributions to the intellectual development of children and youth.

With the schools' becoming better centers of learning with each succeeding year one might conclude that educators should keep on doing the job they *are* doing and, in time, might expect that the excellence of elementary, secondary, and higher education would become self-evident. Unfortunately, such has not happened and is not likely to happen. If anything, unfounded criticisms of education have become more frequent and, in some cases, more irresponsible since the present outburst of "school-baiting" began around 1949 or 1950.

At present the situation is a serious one. The need for continued improvement of education is greater than ever in the dangerous war of conflicting ideas we are waging with nations opposed to democratic values. This is especially true because education is a prime instrument of survival. Also, with elementary, secondary, and higher education expanding tremendously, there is a need for sustained financial sacrifices on the part of the public in order to support at more adequate levels universalized educational opportunities. If unfounded distrust of education is fostered day by day by writers who contend that we are less well educated than we were a generation ago (1) or who claim paradoxically that we should spend less money on education (4), it may become increasingly difficult to operate the schools in terms of sound teaching-learning principles and also to obtain the increased proportion of the national income which larger and larger enrollments require.

For these reasons it is of greatest importance for educational leaders to take pains to familiarize themselves *specifically* with the data which document the present strength of public education. These data clearly show that the fundamentals are not being neglected in the elementary school, nor is content dissipated in the high school, nor is higher education in the U. S. inferior to the European variety as implied by the more vocal critics (1), (13).

## Education's Academic Strength

Two tremendously important facts have generally been overlooked in recent and current discussions of the alleged "failure" of our schools to insure that children learn the three R's. First, the test scores made by children in such fields as reading, writing, and arithmetic *have consistently improved for generations.* Second, the children making increasingly better scores on the same or comparable tests have grown younger until the average child today, by the time he is in grade four or five, is approximately *one year younger* than children of 35 years ago. Let us look more closely at these points.

A few years ago, Rock (11) located more than a dozen research inquiries dealing with children's academic achievement. This body of research clearly demonstrated that pupil performance in the U. S. had tended to improve with each generation. Data from other sources tend to be similar. Statistical information compiled by one of the larger companies producing nationally used standardized tests, for instance, indicates that children today are performing better in reading and in arithmetic than they did even a few years ago. When tests taken by 230,000 pupils were examined it was learned that children's scores on the same national tests had improved by 12 percent during a recent 10-year interval (2), (14).

A research division worker in a midwestern city made another of the recent analyses which have substantiated the growing academic strength of public education. He administered arithmetic and spelling tests originally used in 1934 at the third and fifth grade levels. He concluded that children in the same community, 20 years after the first tests were given, were making significantly better scores than their predecessors had made (7).

The consistent increase in pupils' academic achievement is even more impressive in view of the point made earlier, namely, that children in a given grade today average about 12 months younger than did children in the early 1920's. This shift in age, noted by J. Wayne Wrightstone (15), apparently may be attributed to changes in promotion policies; to a decrease in the practice of arbitrarily "failing" children who do not complete minimum requirements for a given grade. A generation or two ago, 50 percent, and sometimes more, of the children who began grade one were retarded one year or more by the time they completed grade 8. Despite the fact that more children are staying in school longer, and despite the fact that they average as much as a year younger by the time they reach the middle grades, the current educational practices so often bitterly criticized have resulted in appreciably superior academic achievement by today's children!

Alarums with respect to the decline of academic standards at the secondary level are as unfounded as the purported "deterioration" of the elementary school. An example or two should serve to establish this point.

Some critics, such as Arthur Bestor (1) or Roger A. Freeman (4), identify nonacademic or "life adjustment" courses with soft pedagogy. It is well to note, in this connection, that there are many more secondary school children enrolled in science, mathematics and foreign language classes, *in proportion to the high*

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*school age population of the U. S.*, than were enrolled in such classes in 1900. Statistical data from the Department of Health, Education, and Welfare (3) indicate that 400,000 high school youth, in round numbers, were taking one or more science and mathematics courses at the century's turn. At this time there were 75,603,000 people in our country. In 50 years, while the total U. S. population grew by slightly over 100 percent, our secondary science and mathematics enrollments increased by 600 percent and 900 percent respectively.

Even the purported decline in foreign language study has sometimes been inaccurately presented. Actually the number of pupils working in this field has grown, rather than declined, in proportion to the number of children of both elementary and secondary school age. According to the Modern Language Association, there were 5000 children learning a second language in grade 6 or below in 1941. Approximately 400,000 were enrolled below grade 6 by 1957. As reported by Mildenberger in an Office of Education pamphlet, in one three year period alone (1951-54) there was a 400 percent increase in the number of children in elementary (grades 1-6) foreign language programs (8). Insofar as the high school is concerned, the total number of youth studying a second language increased threefold while the national population merely doubled from 1900 to 1950.

Another illuminating bit of information is the following: Last year 58 percent of our secondary school teachers were giving more than half of their teaching time to instructing in such academic fields as English, science, mathematics, history or social studies, and foreign language (9). Many other teachers taught in these fields, too, but for less than half of their time. Not one secondary teacher in 300 gave as much as half of his time to so-called "core" courses (9); the cores which some critics would have us believe are so poorly conceived and so prevalent as to be undermining the curriculum.

In view of the facts, the strength of American education does not merely reside in mass education but also in increased levels of achievement in the three R's and solid subjects. These attainments are being made by young people who are distinctly younger than their parents were a generation ago.

## Strength in Numbers

At the same time, these striking and reassuring data must be viewed as even more significant because of the concomitant strength of our schools in dealing with mass education. Fifty or more years ago American secondary education in particular was the privilege of a small group of youth—a mere 250,000 youngsters in 1890 in contrast with 8,000,000 youth in our high schools during 1958-59. Phrased in another way, approximately 32 children are in U. S. high schools today as compared with every one enrolled 68 years ago!

The public schools have made their excellent academic gains in the past 50 years while absorbing and educating *all* the people's children—many of whom, for intellectual, sociological, or financial reasons, probably would not even have finished grade school in 1890 or 1900 when nearly one child in five in the 10 to 15 age group was already gainfully employed (12).

Here is strength, indeed! *Mass* education in the 1950's is eventuating in higher levels of academic achievement —as repeatedly shown by test scores— than the level of scholastic competence

attained by much more highly selected groups of pupils before and at the turn of the century.

Here, too, is an answer to those who say that American education suffers by comparison with the strength of education overseas. European education remains highly selective at the university preparatory level as in the British university preparatory grammar school or in the Swiss *école cantonale*. As a result of this European selectivity, it must be borne in mind that only those American high school pupils eligible for the National Honor Society can be compared with the *total* student body in European university preparatory high schools. We educate the mass of our youth including the most able; European systems educate only a small minority and weed out 60 to 80 percent of the children who are less academically inclined. This elimination takes place at the equivalent to our upper elementary-junior high school level (6). About one European youth in twenty can complete secondary school and attend a university.

Because of the mass of students who enter higher education in the U. S.—some five times as many as enter European universities—*only* those American students eligible for Phi Beta Kappa can be compared with *all* European students at this level. Even so, our relatively unselected students in higher education appear, for example, to compare well with those in Britain (5). Surely the "Phi Beta Kappas" in our universities—our top 20 percent—compare well with the total European university student body which, as a result of selection, is the academic equivalent to our upper 20 percent. And many youth who would be barred from higher education in Europe do have open to them in the U. S. this channel to self-realization.

Friedrich Nietzsche, writing in the last century, said, "Simply by being compelled to keep constantly on his guard a man may grow so weak as to be unable any longer to defend himself" (10). Let us hope that we need not weaken our schools by being forever on the defensive. Let us also be proud and secure in the conviction that sound *data* document the strength and vigor with which our schools have stimulated intellectual development in children and youth. Public education has not only the *demonstrable* strength of quality—it also makes the vitalizing contribution that only mass education can make to the maintenance and improvement of a vigorous culture.

## References


1. Bestor, Arthur. "We Are Less Educated Than 50 Years Ago." *U. S. News and World Report* 41:68-82, November 30, 1956.
2. California Test Bureau, Bulletin of. *A Comparison of Pupil Achievement Before and After 1945.* Los Angeles: the Bureau, p. 8.
3. Department of Health, Education, and Welfare. *Offerings and Enrollments in Science and Mathematics in Public High Schools.* Washington, D. C.: U. S. Government Printing Office, 1956. p. 24.
4. Freeman, Roger A. *School Needs in the Decade Ahead.* Washington, D. C.: The Institute for Social Science Research, 1958. Also see Freeman's "Dollars and Sense in Education," *The Civic Federation, Bulletin 498,* November 1956.
5. Gallup, George. "Match Your Knowledge with Oxford." *The Reader's Digest* 69:137-38; 178, August 1958.
6. Green, Martin. "The Iron Corset on Britain's Spirit." *Harper's Magazine* 216:64-70, January 1958.
7. Lanton, Wendell C. "The Proof of The Pudding." *The Phi Delta Kappan* 36:136, December 1954.
8. Mildenberger, K. W. *The Status of Foreign Language Teaching in American Elementary Schools.* Washington, D. C.: Department of Health, Education, and Welfare, 1955.
9. Research Division, National Education Association. "Status of the American Public-School Teacher." *Research Bulletin* 35:26, February 1957.


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FRANCES F. FERIS and STUDENTS

# We'd Like To Comment On Our Own Education

**Teacher and students here combine their comments in a thoughtful—and piquant—evaluation of their own education.**

THE PENDULUM of education swings and swings and comes to rest never. Five years ago the study of foreign languages brought the weight almost to stagnation; right now those who would shrink the world, or those who would speak Russian, Chinese and Japanese have given the balance a violent push. Sputnik gave the pendulum a jerk that has swayed it violently for months —gyrating between the elite and the mass; between social adjustment and intellectual development; and between science and humanities. Which shall it be? Is there anyone besides the public who really knows? We in the schools find ourselves in the pit of uncertainty. Should the emphasis be on the French lesson or on the family? On science or on sane driving? On maternity or mathematics?

To see the truth one must turn to others for data. Then to what more frank contingent than present and past students can one go to get an unbiased analysis of a school's program and teaching? But be prepared to be brave, for these critics pull no punches. The encouraging assurance, however, is that one must go for the truth to those who have some intellectual development. They will speak frankly concerning you, your teaching, other teachers, and others' teaching. Do not look for flattery; more likely they will give you the raw facts.

First, to understand a little better the educational background of the people who wrote this summary, we must look at the organization and curriculum of our school. For many years we have had a three division system for graduation: college preparatory (principally math, natural sciences, social sciences, language, and English); commercial (accounting, English, bookkeeping, secretarial courses); and general (only requirements are three years of English and one year of American history). The past two years, satellites and educational condemnation have sent us out into space education by adding a fourth track for the high academic potential people (HAP). These students we like to call our achievers since they were not chosen on IQ alone, but on achievement, interest, and teacher recommendation.

## Accelerated Grouping

Our HAP classes are in math and English. We have accelerated grouping

in every subject. One boy enrolled in such classes during his senior year gives this estimate of our setup:

I think that my education, with notable exceptions, was organized along lines of intellectual development. Perhaps a few examples would help to clarify this point. In my freshman year, I had a class in beginning science. The teacher's methods of stimulating the all-male class were push-ups, back-alley sex, and the stories out of the "men's magazine." My sophomore biology class was one in which the teacher read the questions and answers the day before a test, and generally spoon-fed her students. At the same time, however, I was being asked to do research and present my ideas on such things as politics, government, American democracy, and the classics of American literature. The real intellectual pushes began in my junior year. My math teacher told us to go it alone and see how far we could get on our own steam. My history instructor asked her people to participate in discussions and research projects. In that class there were not the traditional "In what year was the War of 1812 fought?" questions. Instead the test questions would read, "Discuss some of the underlying causes of the War of 1812."

Our senior year mathematics teacher referred to trigonometry as a "snap course" and invited his students to enjoy mathematics through personal achievement.

In short my education at the high school level was an experience in using my intellect. Just like the physical muscles, exercise brought development. I was encouraged historically to find out why, not when; mathematically, why, not simply how; scientifically, how to reason, not to accept. I consider those why's and how's intellectual development. My fellow students were directed away from the class-taught social adjustment and toward development of their intellects. We never missed the classes in Bachelor Living and Dating I.

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We keep away from the "frills"; we weave no baskets nor do we learn to drop hankies gracefully. Our clubs are extensions of the curriculum—English, Latin, future professions of all sorts. This same boy, who now attends Notre Dame, gives this advice, "If I were in charge of the situation, I would completely purge the high schools of all sororities, fraternities and purely social clubs. (We have.) The schools of the nation should have a more important function than sponsoring parties and projects for the people who attend for social benefits."

One of our merit scholars has written this analysis of her education in our school:

In my own education in high school, no critic could be more unjust than the one who contends that intellectual development was sacrified for social benefits. I know that probably a great part of the change in me during my high school years was due simply to the fact that I was growing up, but still I know that much of what I have accomplished and what I shall accomplish is the direct result of being in my particular high school, working under my speech coach, the annual sponsor, notably, and of various other teachers, most of whom I believe to be above average ability. In sophomore English, we wrote themes and research papers on a more advanced level than I have ever been called upon to write in college. We were expected to do more library research, to read a better level of periodicals, and to be more sure of our English usage all through high school than is expected of many college freshmen and sophomores. I am acquainted with a great deal of the best contemporary writing, because I was required to read it or to hear it read. Our high school offered, and, if we were headed for college, we were expected to take, courses in biology, chemistry, physics, advanced algebra, solid geometry, and trigonometry.

Most of the clubs sponsored by the school

were those in the intellectual field—National Forensic, National Honor, Latin, Future Teachers, Science, even chess; and there were generally scholastic requirements for membership. Never does a year pass that several of our seniors are not announced as having won some of the top scholarships of the nation; e.g., Harvard freshman scholarships, the Mills freshman scholarships, National Merit scholarships, General Motors awards, Ohio Oil, Elks, and others.

So far the estimates have come from people who were honestly complimentary. On the other hand, we have our critics and the criticism is mostly centered on mediocrity: bringing the best down to the average; finding hopelessness in a below-average class; discovering boredom by the accelerated caught in a below-average class. Pertinently writes one critic, a girl now in a midwestern university:

> The average student is separated from the below-average. But even placing the pupils in three categories instead of two does not seem to solve the problem. Admittedly, they are categorized according to intellectual abilities. But the stigma of the "intellectual" is still placed on the highest group and nothing is done to relieve the stigma on the below-average student. The attitudes of the students themselves dictate that there is some shame in being either intelligent or below-average.

In this same vein writes a boy in Cal Tech:

> To most students education consists of a textbook which is just as absolute as the black and white with which it is printed. When doubt and curiosity do manifest themselves, they cannot be well exploited because of the pressing necessity to cover outlined material with everyone. The answer to the problem? Obviously we cannot shorten our courses to make room for the *why*.

Perhaps the most depressing thing that can be said is that the deeply motivated student, one that really has it "in him" will rise far above the average, both in mastery of materials presented and in the development of reasoning powers to put the information into use. More credit to these students, but it is a deplorable condition to make good students rise above our academic environment, rather than be stimulated by it.

## Attitudes and Progress

After all is said and written, this high school of ours attempts to provide for intellectual advancement: classes for accelerated pupils for both juniors and seniors; segregation into homogeneous groups even in the sophomore year. At least 25 percent make use of such stimulation. We know that we have some positive results, for many of our people hold fellowships and scholarships throughout the United States; we are proud of the fact that many of our former graduates are working for advanced degrees in many universities and colleges. Seriously, however, we have a fight to attain intellectual development. There are forces and pressures against which we need to muster a continual attack.

First, we have to contend with a flood of pupils who are in attendance presumably to keep warm. They are here to make their dates, to cause a commotion which will direct attention to themselves. There is a constant fight to keep their shirts buttoned over their hairy bosoms, to keep their trousers above their iliums, to sign their absence excuses, and to keep their impertinence under control.

A second obstacle is that there is a black mark placed against the intellectually curious. One girl writes:

> In my experience, I have found that the individual who came up with a new idea, who was able to think beyond his classmates, and sometimes beyond his teachers,

was stifled, hushed, and placed in the back of the room. . . . The emphasis in the American way of life is to get along with one's fellowmen. This is a lofty aim socially; but educationally, it only brings scorn upon the person who is not a "regular guy," who is not a member of the football team, who is not head cheerleader. Too often members of the athletic squads are held in higher esteem than the honor roll students. The leaders of the school are not the intellectuals capable of guided leadership; oftentimes it is the subnormally intelligent who have the virtue of "getting along with everyone" and being a pal to each and all. Too many of the potentially intellectual fear the sobriquet of "Brain."

There is yet another pressure fighting against anything intellectual. After all, these people are going through the period of adolescence. There is a natural desire to be popular—a desire perhaps too often fostered by the parents. Girls have to appear beautiful but dumb; the boys must be brawny but complacent about studies. In an English class not long ago a boy told us that one of his HAP girl friends made a practice of asking foolish questions about physics just to appear ignorant. Her motive—to keep boy friends. Football boys who receive academic honor pins enjoy the derision of their friends.

Finally, we should mention another powerful force which hinders learning. That is sheer laziness on the part of many, many pupils. Again this attitude has been fostered in the home, since parents want their children to be happy, to have everything they want. Many teachers fall into line with weak assignments and unearned grades; they fear to do otherwise. Children of this day tyrannize over too many people—use of the family car, allowances, wild game hunting in the West, formals and evening jackets, excuses to get back into school. When the administration attempts to discipline children the pupils are rebellious, feeling imposed upon. Parents are too prone to blame the school for everything the child does wrong. Teachers are supposed to be baby sitters and social adjusters as well. One student stated the job this way, "Personally, I have nothing against social adjustment; but the adjustment of the individual to society is the business of the home, of the family. Particularly in this age we must use our schools to train the personnel we need."

In spite of all the hurdles—biological, parental, and social—the schools are making headway. In the past year the intellectual horses are feeling their oats; more and more our youngsters are being motivated by the idea of working for scholarships and for academic recognition; our student body president is less ashamed now of being a debater than he was two years ago; there are fewer lazy people infiltrating into our below-average classes; suspension of the ducktails and the leather-jacket series is meaning just that—clearing out and getting jobs; fewer windows are being broken in the homes of the administrators; more people are getting up the temerity to appear on the stage for honor pins at the end of grade periods.

There is hope ahead when we consider that one of our graduates who is to enter the teaching profession has the behindthought and the forethought to make the following evaluation of the training which she received in our high school:

As a college senior planning to embark upon my own teaching career next February, I find myself becoming increasingly thankful that instigation of intellectual development was of primary importance to several of my high school instructors. To these middle-aged men and women—graduates of

*(Continued on page 182)*

L. KATHRYN DICE

# Unmet Needs of High School Students

**A recent survey of the aptitudes, abilities and post-graduation plans of high school seniors reveals significant areas of unmet needs.**

THE PURPOSE of this paper is to introduce its readers to a handicapped population in our schools. Unlike the blind, the deaf and the lame, whose handicaps are fairly noticeable, this population's handicaps are largely hidden. In most instances the handicaps are covered under a thick protective coating of conforming group behavior, contentment to be an average student, a workable compensation for lack of educational background; under the cloak of the inevitability of military training and the resiliency and buoyancy of youth which make it possible for this population to say, "Oh, we'll get along anyway."

Unlike the blind, the deaf and the lame, in most instances the handicaps of this group are situationally engendered, not congenitally or hereditarily derived. This group has been handicapped situationally by mass education in an almost totally verbal school, by crowded classrooms where learning deficiencies are accumulating, by narrow curriculum offerings, by misguided attitudes toward youth, by a lack of opportunity within present existing schools to develop aptitudes and abilities along lines of personal interest, financial possibility and employment opportunity. Also, unlike the blind, the deaf and the lame, in many instances we, the educators, are handicapping this group.

Education describes itself as a process whereby youth is prepared for effective living and for making a living. For many years, particularly in the secondary school, this process has been almost exclusively verbal, general and cultural, a preparation for the so-called next step into college or professional training. But two things are happening: first, not many of our students are taking the next step, some because they cannot, some because they will not, and many because they do not want to; and second, changes are occurring. Civilization today is a matter of new ideas, of new machines, of new ways to work, and new plans for living together. Science, mathematics and work are taking on new significance. The demand for trained workers increases daily. The secondary school is called upon to face up to a reevaluation of its function, its methods, its organization, and particularly its curriculum. Our schools must, like all other schools, face up to this

challenge. We must look again to curriculum revision in the high schools and the development of technical schools and programs for youth with aptitude along special lines and for whom opportunities for post-high school training are remote, if not impossible.

## Plan for the Survey

With all this in mind a comprehensive study of the aptitudes, abilities and post-high school plans of high school seniors recently was undertaken. This study was devised to serve five purposes: first, to explore through the use of standardized tests the abilities of high school students in order to look objectively at the range of ability and aptitude of those who would graduate in June 1958, from the Allegheny County, Pennsylvania, public high schools; second, to consider their educational and work plans in order to sharpen the perceptions of counselors and teachers as to the wider significance of individual differences; third, to relate observed aptitudes to school plans and employment opportunities; fourth, to provide statistical data based not on a population in California, Kansas, or New York, but based on a real live population of our own adolescents in our own schools, to support the need for extending the offering of the secondary schools to include technical types of education; and fifth, to indicate areas, should such emerge, in which secondary education as a whole may need improvement.

Now, may I give you just a very brief description of the experimental setup? After a very exhaustive study of the literature on aptitude testing and a study of the manuals of aptitude tests, particularly as to their reliability and validity, and after a study of the local opportunities for employment and job finding in this area, a test battery was set up. This took three hours to administer and tested aptitudes in five general areas of aptitude which we believe to be significant for the youth of Allegheny County. Included in this battery were tests designed to measure scientific aptitude, as related to such courses as laboratory technician and nursing; artistic aptitude, as related to such courses as cosmetology for girls, design and construction for boys; verbal aptitude, as related to the application of learned principles to specific problems; clerical aptitude looking toward a better type of preparation for the students who go into the world of business; engineering aptitude, as related to the skilled and semi-skilled trades.

Fourteen high schools agreed to participate in this study and the students who participated were selected completely at random. There was no attempt to stack the cards either in favor of the good student or the poor student, in favor of the academic student or the commercial student or the vocational student. The fourteen participating high schools were asked to submit an alphabetical list of the names of the students who were graduating from high school in June 1958. Every fifth name on these lists was selected to participate. Thus, the students who are in this study are included on this random sampling basis by accident of initial of their surname. One high school in which the tests were scheduled to be administered in April and early May decided to withdraw from the study. Therefore the following data cover only 13 schools.

The groups tested were made up of 433 seniors graduating from 13 high schools in a one-quarter segment of Alle-

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gheny County. They were between the ages of seventeen years, one month and twenty years, ten months. They were generally physically fit—about 20 percent wore glasses, two said they had hearing losses, one said he had a cardiac condition, and one had an artificial limb. In most instances they were bright young people. They were well dressed, they were conforming, they were pleased with themselves; they were eager to participate, full of life, and ready to talk about life. They were ambitious in some cases, they were frustrated in many cases; they were uncertain about the future; they were seeking guidance. Some of them were able to blame their parents and their teachers, many of them were able to blame themselves. They were hunting answers to burning questions; they made up a good cross section of teen-agers as we know them today. They were to graduate from prescribed courses. They had plans, they lacked plans, but they knew what they would have liked to do if the facilities had been available, if the attitudes had been right, and if there had been greater freedom of choices.

The tests administered to these 433 students fell in three general areas. There were ability tests, both of verbal and nonverbal general intelligence; tests of aptitude in five areas, mentioned previously; and tests of previous learning in terms of arithmetic and reading skills. Each student completed a questionnaire in which he described himself and rated himself as to his use of his abilities in the preceding years of school and gave a description of his future plans for further education and choices of jobs and professional opportunities.

### Two Contrasts

Now I want you to meet two of the 433 and know them intimately. First meet Helen and consider with me the profile of her test scores. She is an academic student in a large high school and one of the eight students in the total 433 who rated herself above average. She has just passed her seventeenth birthday, is slight in build, well dressed, well groomed, an easy conversationalist, a fine type of teen-ager, is popular with both boys and girls of her age group, and physically strong. She is an only child. Her mother is a widow and she and Helen share a small apartment. Her mother is employed as a secretary. This mother and daughter read and play together and make many plans for Helen's adult life. Helen would like to go to college but she knows it will be a financial struggle. She wants to be a social worker, a teacher or a nurse. Her test results show that she has aptitude in any area and could follow academic pursuits or technical pursuits and be successful in either field. The deciding factors for students like Helen should be their own personal interests. High schools would be different if all students were like Helen!

Now meet George, who is in an academic course with average and below-average grades. He cannot spell academic, "a-c-m-e-d-i-c-k." He has repeated three grades and is now nineteen and a half years of age. He is out of step with his parents and with his teachers. His test scores show that he is high in terms of ability but low in terms of achievement, with little or no aptitude in any specific field. George wants to be an electronics engineer or, surprisingly, a high school English teacher.

And so it goes. Each student has his own constellation of ability and disability; each student has a need for guidance along lines of his own; many students need new courses, new direction, new

outlets if their potentials are to be developed and utilized profitably.

## Results of the Study

All of the 433 students in this group now have high school diplomas. They vary widely. Test results indicate that the lowest verbal IQ was 72 and the highest was 159. One asks at once, if the high school met adequately the needs of the student with the IQ of 72, what happened to the student with an IQ of 159, and vice versa? Eleven of these students had verbal IQ's of less than 90; 252 had verbal IQ's between 90 and 110; and 120 had verbal IQ's from 110 to 160. This is most startling when one recalls that only eight of the group rated themselves above average in high school grades.

As we move into this technological age, we can no longer be content to measure ability in terms of verbal IQ alone. Therefore, it is necessary to consider the distribution of nonverbal, or performance IQ's. In this particular study the lowest nonverbal IQ was 59 and the highest was 164. Seventy-three of these students had nonverbal IQ's below 90; 256 had nonverbal IQ's between 90 and 110; and 104 had nonverbal IQ's between 110 and 165. Again, one is impressed by the range of ability indicated and the limited opportunities in the usual high school to meet the needs inherent in this range.

The results of this study indicate:

1. That 83 of these students showed, on selected tests, aptitude to do either academic or technical work; they are equally capable in both broad areas and able to make the choice of a professional or technical field in the light of personal interests and available opportunities;

2. That 196 of these students showed, on selected tests, outstanding technical abilities in one or more of the areas in which we tested;

3. That 71 of these students showed, on selected tests, average and below-average ability academically but have technical or vocational aptitude at the skilled trades level;

4. That 28 of these students showed, on selected tests, ability only at the semi-skilled trades level;

5. That 29 of these students showed exclusively verbal aptitude. This finding should be emblazoned in letters of red for it shows that of this total group of students graduating, to a large degree, from courses exclusively verbal, only seven percent are exclusively verbal students by aptitude!

6. That 26 of these students show no aptitude along technical, vocational or academic lines.

There are data, also, to indicate that this group is not only handicapped by limited opportunity to elect courses in line of aptitude, but is also handicapped in other significant ways—the handicaps of unrealized opportunities. Seventy percent of the 433 students in this study read below the forty-fifth percentile for twelfth grade students. This means that three and one-half out of five were reading somewhere below the tenth grade level. Also, 46 percent of these 433 were in the same dilemma as far as mathematics was concerned. These findings are sobering; they are serious. They cause us to stop and reflect on what we have done with ourselves, but more particularly on what we have done to those upon whom the doors of the school have already swung shut.

In other academic skills we see still more signs of unrealized opportunity. Two of the students in this study could not spell correctly the name of the high school from which they were graduating; 11 of them spelled incorrectly their district of residence; 75 of them spelled in-

correctly the job which they hoped to take when they leave school, and included in this 75 are 3 who said that they want to be teachers. Forty of them could not spell the name of the course from which they were graduating.

Stated in still another way, the findings indicate that 18 percent of the 433 could do anything they wanted to academically or technically; 47 percent of them had special untapped ability in technical fields; 14 percent should have been in vocational schools; 7 percent were exclusively verbal; 7 percent function at a semiskilled level; and 7 percent showed no aptitude for either academic, vocational, or technical work. This, too, is staggering, when we realize that for a hundred years the high school has existed for the academic student, and it is further staggering to see how many of these students might have been much more profitably spending their time in some other area of education more suited to their abilities and more in line with their personal interests.

Up to this point the reader may be saying, "Oh, well, they'll go on to college and college will make up for everything we haven't given them." In this regard, consider with me some of the data concerning the educational plans of students with aptitude for academic and technical pursuits. This represents the three ablest groups—those with aptitude in every area, those with specific aptitude along technical lines, and those with exclusively verbal aptitudes. Of the 83 students who have aptitude in every area, 23, or one in four, expect to go to college; 14 of them, or one in five of these ablest students expect to go into some kind of post-high school training at the noncollege level—comptometer schools, beauty schools, secretarial schools, schools of nursing, armed forces; but of this segment of our high school population, 46 students, 50 percent or one in two, will go directly from the door of the high school to the door of an employer.

In our second ablest group, those students with outstanding technical ability, 24 percent, or one in four, plan to go to college; 27 percent to a trade school of some type; and, again one out of every two will walk from the school door to that of employment.

In the group which is exclusively verbal, only 13 percent plan to go to college. Of these, 19 percent plan to go into trade schools or the armed forces, and 68 percent, almost three out of four, will walk from the school door to that of industry.

## Recommendations

This detailed study of the aptitudes, abilities, and ambitions of 433 students just about to graduate from our high schools shows that these young people are leaving school with many unmet needs. What are some recommendations growing out of this survey?

1. We can no longer postpone the extension of the reading program into the secondary school. The great amount of reading retardation indicated here stresses again the fact that reading instruction is both an elementary and a secondary school problem and, therefore, both an elementary *and* a secondary program are exceedingly important. The elementary school makes use of textbooks and grouping to structure itself for the teaching of reading. Children step out of that atmosphere into an unstructured situation where they are supposed to perform independently with skills that are not yet consolidated. The figures showing that 70 percent of this group are graduating below average in reading skills call for new approaches to the reading problem. What is required in the high

school is an extension of the developmental reading program and not merely a remedial one.

2. We need the same type of improvement in mathematics, again not remedial, but developmental, in terms of a better foundation for the scientific and business careers which are the goals and ultimate opportunities for many of the students graduating from our schools. This is the scientific age and mathematics is an essential tool in the mastery of science; we must meet this need.

3. We need to make better use of test results and test devices. We have been smug, in too many American schools, in our measurement merely of ability and achievement in narrow fields. We need to explore aptitudes, interests, and many phases of the individual growth and development of the students who crowd our doors. In many cases the incompatibilities in ability and achievement ratings have been a source of growing concern to many of us. Extension of testing to include many other phases of measurable characteristics may help us to understand these incompatibilities and to recognize that the role of school is not merely to measure, but to provide new offerings as a result of the measurement.

4. All of our students need better counseling and guidance, not only by guidance counselors, but by every teacher who touches, no matter how superficially, the life of the teen-ager. From us, their teachers and friends, they need not only greater familiarity with the world of work but they also need improved motivation toward better personal expression. All but 8 of these 433 students were apparently content to slip into the mediocrity of being average. Personal endeavor, personal standards for good work, personal feelings of sources seem to have been replaced by the pseudo-comfort of conforming to the average. Our students need more personal goals; they need some personal drive; they need creatively inspired teachers to stand behind them to give them encouragement, the help to rise above mediocrity and to dare to be an individual.

5. Members of this group need help in formulating more realistic plans for themselves both within and for after school life. These plans should be based upon as much personal insight as we can give to youth in terms of their abilities, their aptitudes, their ambitions, and availability of opportunity, and the sense of personal satisfaction and fulfillment.

6. There is need for a new and more enlightened individual approach on the part of the high school teacher—students are not alike, they cannot be alike, they must find outlets for themselves that are not alike. This need is closely related to the one which follows.

7. There is a need, particularly in the secondary school, to reassess, reevaluate, and reinterpret our thinking about the meaning of intelligence. We can no longer be content to measure and talk about a single thing we call intelligence which manifests itself in proficiency with books alone; there are *intelligences* and they manifest themselves in various ways —in technical pursuits, in sciences, in art, in work, as well as in words. We owe it to the students who come to school to us to know them, not only as verbal students, but along all lines which it is possible for us to consider and for which we can provide. This calls, too, for a more wholesome attitude toward *their* range of individual differences, rather than toward their lack of ability within the narrow limits of a prescribed plan.

8. There is a need for extended curricula at the local school level.

9. There is need to give support to

and help in developing a new type of school—a technical school at the secondary level, in line with demonstrated aptitudes, in line with current social needs, and in which students can express not only what they *want* to do but also what they *need* to do. Our contemporary way of life calls for this if we are to survive collectively; the aptitudes of youth call for this if they are to profit individually.

We, as educators, can and must strive to meet the needs of children. This is our professional, our moral and our democratic obligation. We can and we must meet the demands of modern life. Each day the press bombards us with information about the need for trained workers in many technological fields. This lack in our social structure is our concern. This, too, means to educators a professional, a moral and a democratic obligation. We dare not placidly turn these responsibilities away from our schools to the private trade schools or rest smugly on the hope that the pupils will go on to college—they often do not and many may not want to go.

Recently, in assuming the presidency of the Johns Hopkins University, Milton Eisenhower made these two statements: "The brains of American youth are our greatest national asset" and "In our American youth lies the balance of power for democracy." We can and we must abandon our traditional academic narrowness. We can and we must seek new avenues of educational experience for children. We can and we must cherish youths' strengths and help minimize their weaknesses. We can and we must experiment and explore *with* them a wider range of educational opportunity.

## Christmas Is Near

A young coed
    In the last row
    Looked at the snow
And shook her head.

"My, how time flies!"
    With yawns she thought
    While the prof taught
Of Hitler's rise.

"Christmas is near—
    Look at that flake!
    What should I take
With me this year?"

She held her pen
    And wrote: "For home:
    Blue skirt, hats, comb,
Ice skates . . ." But then,

She paused to get
    The next girl's notes,
    Comments, and quotes
On Hitler; yet

All she saw there
    Was: "Things for home:
    Hat, hairclips, comb,
Coat, underwear . . ."

—Panos D. Bardis, *Sociology Department, Albion College, Albion, Michigan.*

FLORENCE D. CLEARY

# The School Library and the Changing Curriculum

**For the children and young people in a changing world, the teacher and the school librarian need to work together in providing meaningful and realistic learning opportunities.**

IF THERE is one thing that we can be sure of today beyond our abiding faith in the future, it is that we live in a confusing age; one described as the anxious age, the age of propaganda, of technology and automation, the age of conformity, of slackness, of fuzzy thinking, the atomic age, the space age, and the age of rapid social change. We are told that about all we can educate for is *change,* a generalization not very helpful to the hundreds of dedicated teachers and librarians who are attempting to provide the most useful, meaningful and realistic learning experiences for the nearly 40,000,000 youth who are today enrolled in our schools and colleges.

That education has changed, that the curriculum is changing and will continue to change rapidly in the next decade is as certain, as that teachers and librarians will seek to provide children with the learning experiences that may make the difference between the annihilation of the civilization we know and believe in, or its preservation and enhancement.

Let us examine, therefore, a number of curriculum trends of the past decade that have brought significant change in the function and role of the school library, those which give greatest promise for the improvement of education in the years ahead, in a future brought into sharp focus by the launching of Sputnik, an event that ranks in importance with the invention of fire, the wheel and printing.

## Trends in Curriculum Development

The first significant change in the curriculum is the sharper focus on the child, his physical and emotional needs, and his developmental tasks that are being spelled out in the attempts to adjust the curriculum to the child as well as to adjust the child to the curriculum. We are attempting, first, to *provide* the child a broad, balanced education fitted to his needs and abilities; and the content of the curriculum is directed toward a mastery of the knowledges, understandings, beliefs and skills that will enable him to reach his highest potential and to contribute effectively in all life's associations and relationships.

Methods of teaching adhere far more strictly than in the past to what has been learned through research about how chil-

dren grow and learn. While it may be true that some psychologists have gone overboard in suggesting that everything should be made easy for youth, that to frustrate a child is heresy, it is equally true that curriculum change has been built on a foundation of painstaking research.

Briefly the research can be summarized as follows: (a) Children learn in different ways, in different situations, at different rates, from different materials. Although they all go through stages of growth from infancy to maturity that can be identified, individual differences in growth and learning are marked. (b) Learning takes place when the new learning is related to something already known, when the child can see some use for or meaning in what he is asked to do by the school. (c) Interest promotes learning, and learning, in turn, promotes interest. It is a two-way street. (d) Learning is a change in behavior; in ways of thinking, believing, and doing. It is these findings that have provided the bench marks, the major assumptions on which core, general education, life adjustment education, and problem solving methods have been initiated.

## Changing Methods of Instruction

The heart of these curriculum changes lies not so much in a change in the content of curriculum as in methods of instruction. Adhering firmly to the evidence from research on how people learn, teachers are making it possible for pupils to identify problems that have meaning and reality for them; to locate, gather, organize, evaluate information and to utilize it in reaching conclusions and generalizations—thus translating information into knowledge, understanding and belief. True it is that this method of instruction requires far greater skill and imagination on the part of the teacher than does textbook instruction. The results when evaluated in terms of the pupils' ability to think appear to make the effort worthwhile.

## The Role of the Library

The effects of this general curriculum change on the role of the library in the school is too well understood to need long description. It has had two distinct effects—(a) Libraries are becoming true materials centers where appropriate books, pamphlets, magazines, and audio-visual materials are selected, organized, and made easily available to pupils and teachers alike. (b) Librarians are involved in helping pupils develop skills in the methods of inquiry, as they bring information to bear on their problems whether these be, "How people lived in the 1850's," or "How can local government be improved?" Teachers and librarians are working hand in hand to teach pupils these skills.

The school librarian must continue to take major responsibility for the selection and organization of the learning materials, but he should organize his student staff so that a major proportion of library routines are carried on by them. His major responsibility is to work with teachers in helping pupils acquire skills in the methods of inquiry.

In schools using the newer methods of instruction, there are now fewer pupils coming to the library to read on an assigned topic which they copy word for word out of an encyclopedia. There is less searching by the librarian than formerly. One librarian recently, however,

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did try to locate a strange animal called an "anzee" which a boy insisted was his "topic" for a zoology class. Considerably later she found out that he was assigned to report on the chimpanzee.

The newer methods of instruction motivate pupils to read widely, to explore, to "find the facts, filter the facts, face the facts and follow the facts,"—and the librarian is involved in teaching pupils to read with understanding, to examine the authoritativeness of their information, to tell fact from opinion, to collect evidence and reach conclusions, to turn the white light of reason on problems, to say "what does this information mean to me?" to think critically, not just to gulp and to regurgitate information.

## A Second Curriculum Trend

A second trend in the curriculum is related to the renewed accent on the attitudes, beliefs and behavior of the products of the schools. Schools today are recognizing that they must be judged not only by what children know, but by what they believe and how they behave. That this is a tremendous responsibility to be shared by all in whose hands rests the upbringing of youth—the home, the church, the community, is evident. But how can we help youth believe that service to others is a worthy objective, that human personality is of worth, that a baby crying in Tunisia is our baby, is a problem being tackled more and more directly by the schools.

Studies reveal that these values are not always achieved in classes in civics where pupils memorize the duties and responsibilities of citizenship; that they are not acquired by report card marks in citizenship; that they are not achieved by exhorting pupils to be responsible and cooperative. Beliefs and values are built as children have opportunities to understand them and test them in many school situations as they participate in planning both in the classroom, in cocurricular activities, in the student council where they share in policy making, where they identify school problems and seek solutions, where they carry out plans and evaluate results.

There is nothing new about schools having service organizations, although in the past their main objective has often been to get work done around the school. Now such arrangements are becoming real service opportunities, organized and directed as laboratories for democratic living.

Library clubs so organized lend themselves perfectly to this type of learning. When the club is carefully organized, when weekly meetings are held in which members are able to identify library service problems; to make plans, answering such questions as what needs to be done and who will do what; where pupils assign themselves individual responsibility for specific tasks, the learning that accrues comes through the students' evaluation of what they are able to do for other pupils and teachers. Students learn the skills required in planning, in carrying out plans and evaluating results. They learn what it means to be contributing, responsible citizens because they have a chance to understand and test these values in action.

But even more important in the development of values and beliefs is the new emphasis on the actual teaching of the values intrinsic to the democratic ethic, the social cement that motivates and holds this nation together. As teachers have moved to give children an understanding of the American heritage, to make them sensitive to the welfare of others, to see, to hear, to understand, to care, they have found reading of tran-

scendent importance in meeting these goals.

True it is that one acquires many of his values by contagion. Research, however, brings clear-cut evidence that values can be taught. Not by exhorting children to be good, to be responsible, but by providing many situations where they can actually assume responsibility, where they can examine human motivations and human behavior, where they can see cause and effect relationships.

## Responsibilities of School Librarians and Teachers

In books and reading these values can be explored and evaluated. Findings from the studies undertaken by the Center for Instructional Materials at the University of Chicago, the Detroit Citizenship Study, and the American Council on Education provide clear-cut evidence that children identify with book characters and that the identification operates at a very deep level. They not only want to be like the book characters, they actually become them. Think of what we can do in giving the kind of guidance to children so that they can generalize about the characters and situations that they meet in books. Think of the opportunities we have to help them examine human behavior, and evaluate human relationships—not in broad terms—but in such specific areas as differences between generations, economic differences, wholesome family living and the motivations of others. It is not done in reading guidance situations in which children are only asked to tell what the book is about. It is done in book discussions when teachers and librarians ask why characters behave as they do—and what they (the pupils) might have done in similar situations.

When we help pupils choose the books in which characters are meeting the same problems that they do, give them a chance through skillful discussion, through role-playing stories, through helping them reflect and generalize, we will find a great increase in interest and skill in reading among our present "non-readers." But teachers and librarians need to start with children, their needs, interests and developmental tasks—help them find appropriate books and guide them in generalizing about them.

If librarians do not meet this challenge of using books to help children build a scale of values and beliefs, they are missing their greatest opportunity. We should stop using such broad goals as "free reading," reading for pleasure, and "the book is all" and use *all books* as *bona fide* curriculum content. Children will still read for the story, but the teacher and the librarian will formulate goals in terms of the learnings they wish to provide for their pupils and use books as "means" as well as "ends" in education.

## A Third Trend

A third trend in curriculum development that can be explored is the use of educational TV. Make no mistake it is on its way and it is succeeding. That it can provide the best possible learning situation as it combines both sight and sound; that it brings the whole world to the threshold of the child; that it enables thousands of children to enjoy the carefully planned lessons of master teachers; that it may save money; that it can well have tremendous influence on the future of the school libraries are generalizations that should not be shrugged aside.

John K. Weiss, vice president of the Fund for the Advancement of Education, reviews the progress made, the careful evaluation of these projects of equated groups of young people—the

experimental group studying the subject via TV—the control group by the usual classroom methods, with results statistically significant and favorable to the TV groups. He summarizes these experimental projects in these words: "The logistics of manpower and money as well as consideration of quality make it (TV teaching) a foregone conclusion."[1]

What is this likely to do to books and school libraries? Philip Lewis speaking at the American Association of School Administrators recently said this: "Libraries of the future will use TV techniques to eliminate books. Films, tape recordings, and microfilms will take the place of heavy volumes. If a student misses a class, he can check out a film of the session."

## Implications for the Librarian

The future of libraries can go down one road or the other depending largely on the dedication and skill of teachers and librarians who believe that in books are man's best ideas, the story of his achievement, the record of his imagination, of his creative intelligence. Will reading of books become a lost art? It well may, for let us not be complacent about the reading behavior of the American public today! In a recent survey in which one question was asked a careful sampling of the American public—Are you reading a book now?—79 percent said, "No."[2]

We must not assume that putting a book into a child's hands is sufficient. Highet says, "It is useless simply to tell kids to Read A Book. It is like telling them to go away and live for a year."[3]

Unless in our reading guidance programs we start first with the child, help him to keep the wonderful curiosity, the desire to understand, and to know, we are going down the road to the obsolescence of books. People will continue to spend more and more time in front of TV where many of the programs lull people into insensibility, a state of semi-anesthesia.

But skillful librarians will accept the opportunity to use the experiences children have in educational and commercial TV as motivations for continued learning. They know that once interest in a subject has been promoted by a science lesson on educational TV, they can broaden and deepen the learning through the medium of books, where the images are not fleeting and evanescent. But make no mistake some of us may need to change many of our reading guidance procedures.

Some say that the librarian has too many pupils to take care of individuals. This is not an acceptable answer. Every day as school librarians meet groups of children, time should be spent with these groups in ascertaining their interests, in providing them with potential ones, in introducing them to a wealth of materials. Motivating children to read is a matter of good teaching—providing learning situations in which the librarian starts with the interests and needs of pupils, their developmental tasks and their need to achieve them. Through reading aloud, through book introductions, latching onto their interests but going a step further in introducing them to new potential interests, to a world of adventure, of fantasy, of reality—extend-

[1] John K. Weiss. "New Worlds in Education." *Saturday Review* 41:13, February 15, 1958.

[2] Lester Asheim. "What Do Adults Read?" *Adult Reading*, Fifty-fifth Yearbook, Part 2. National Society for the Study of Education. Chicago: University of Chicago Press, 1956. p. 8.

[3] Gilbert Highet. *Talents and Geniuses*. New York: Oxford University Press, 1957. p. 275.

ing their horizons, stretching their minds and hearts, the school librarian provides for real learning in the library.

## A Look Ahead

And finally what is likely to be emphasized in education in the future and what will be the role of the library?

We were disturbed about the attacks on education following the orbiting of Sputnik and were thankful when Explorer took the heat off the schools to the extent that more reasoned judgment could be brought to bear on the problems facing education in this new age. It will be a mistake, a tragic one, however, if we return to complacency. We should continue to re-examine our objectives, to test our methods in the light of those objectives and to re-evaluate our achievements. Can we do better than we are doing?

What should the schools be about? Two or three trends are emerging clearly from current discussions about education as follows:

1. Scientists will not be developed in a curriculum heavily skewed to science and mathematics. They will be educated when, from kindergarten through college, pupils have many experiences with the scientific method; in learning to think critically and creatively, in schools where inquiry is promoted, not discouraged by question and answer methods of instruction. Through the scientific method pupils can be helped to clarify the relationship of science to the larger purposes of life. They will learn the scientific method as teachers treat their ordinary experiences in a way that they can ask, *how* and *why*, instead of having the teacher ask, *what?*

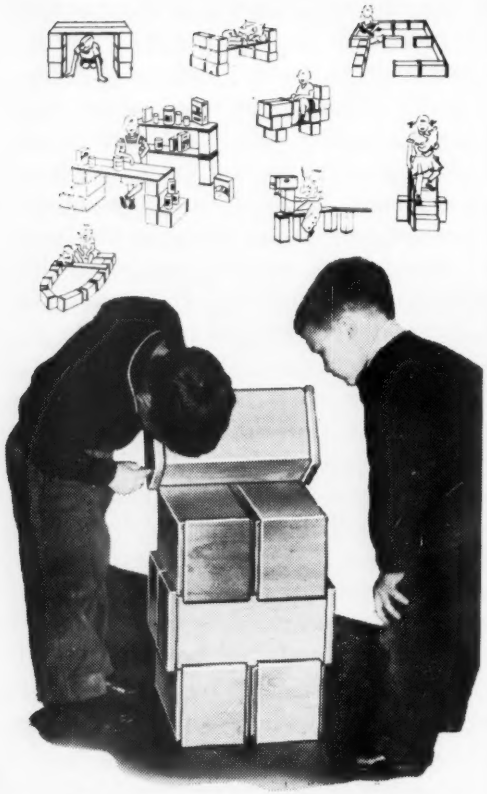
2. Balance in educational experience needs to be continued and encouraged. It is in the humanities and the arts that the individual acquires the skills and insights that promote emotional stability, that enable him to become a more complete personality. While automation and technology pave the way for man to have more leisure, his use of it at present can be evaluated by such terms as the "rape of leisure." We need a curriculum that educates the emotions, that gives the individual the insights and skills for using leisure constructively.

3. The American family and the community must provide greater motivation to children for education. Pupils need to work hard at school, to experience the satisfaction that comes from disciplined achievement. Teachers alone cannot provide this motivation in an American culture that presently calls the intelligent and skillful people, eggheads—in a culture that is permeated by fuzzy thinking or none at all—where conformity rather than creativity appears to be in the ascendency.

If these trends are significant, it means that determined and skillful school librarians will devote themselves increasingly to the task of teaching pupils to think critically and creatively as they master the skills required for locating, organizing, evaluating and utilizing information.

It means that they will provide real learning situations in school libraries taking into account how children learn; that they will not assume that making books available is their major task; that they will teach children as directly as does the teacher in the classroom.

Then they may hope that youth will learn to like to read because they have really learned how; that they will use books and other communication media in the pursuit of truth, and for lifelong learning and fulfillment.



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10. Nietzsche, Friedrich. *Ecce Homo.* (The A. M. Ludovici translation.)

11. Rock, B. R. *Children's Achievement: Today and Yesterday.* Austin: The Texas Elementary Principals and Supervisors Association, 1952.

12. Russell, John D., and Charles H. Judd. *The American Educational System.* Boston: Houghton Mifflin Company, 1940. p. 50.

13. Smith, Mortimer. "How To Teach The California Child: Notes from The Never Never Land." *The Atlantic Monthly* 202:32-36, September 1958.

14. Tiegs, Ernest W. "A Comparison of Pupil Achievement in The Basic Skills Before and After 1945." *Growing Points in Educational Research.* Washington, D. C.: The American Educational Research Association, NEA, 1949.

15. Wrightstone, J. Wayne. *Class Organization for Instruction.* Washington, D. C.: The Department of Classroom Teachers and the American Educational Research Association, NEA, 1957. p. 4.

*(Continued from page 168)*

liberal arts inclined teachers' colleges and universities into which modern theories of "life adjustment" type education had not yet invaded—I owe not only my thirst for knowledge but also my desire to be a teacher. . . . It has been my high school instructors who have shown me that I can be of most benefit to my students, my profession, and my country, not as a psychiatric adviser, but as an instructor whose enthusiasm for learning is contagious. And it is in these dedicated people that my own hopes for the future of American education lie, for I shudder to think of the inevitable degeneration of the minds of millions of American school children who are doomed to be subjected to the teaching methods which my generation has been instructed are the proper ones.

Upon this hopeful note we come to the end of our comments on our education. Ours, we think, is a good school providing adequate education for all who wish to benefit from it. We go even further in providing enrichment for the future leaders in every profession.

# The Importance of People

Column Editor: Fred T. Wilhelms
Contributor: J. Paul Leonard

## As We Look Toward Christmas

*A little over a year ago one of ASCD's founders, a great man and a great American leader in education, went to the American University of Beirut as its president. J. Paul Leonard is well-known to many of us personally—and to the rest by way of his writings. From his overseas post, near the birthplace of the Jewish and Christian religions, Dr. Leonard speaks to us here of the importance of the search for truth.*

* * *

IGNORANCE in any country is like a deep veil over the face; it shuts out the light of knowledge and understanding. When a man of trained intelligence does not know an answer, he turns to one who does or he discovers the answer by experimentation. Each step of new knowledge opens new vistas, just as a strong telescope takes one beyond the observations made by a weak one.

But there are millions today who do not know the joys of being educated, and they turn to superstition, rumor, religious fanaticism, or traditional practices. They live by the fears and errors of generations. Their beliefs have no vitality, for they leave no room for examination or change. But doubt creeps into these beliefs when they hear about wonder drugs, or freedom to choose, or see airplanes replacing camels, or industry demanding skills they do not possess. As these doubts become stronger and as those who receive education tend to live better, the desire for education grows.

My experience at American University of Beirut has given me a chance to observe this transformation in people who have high intellectual ability although they have sometimes been handicapped by lack of the opportunity for education; men who, when given a chance, prove their ability. Three instances come to mind: a boy in Arabia tending sheep and camels for his father, a tribal leader, who yearned to know and who recently graduated with honors in law from one of America's most famous universities; the son of a Beirut taxi driver, who will soon be a successful physician; and a third person, whose father is a doorman for a government official, and who will, in spite of great handicaps, be a successful engineer.

### Yearning for Knowledge

The yearning for knowledge is the prime motivation in education for the young freshman, for the doctor confronted with a strange case, and for the great research scientist. On this premise they live on common ground. One of the great joys of working in those countries where youth have been handicapped by

# Are there answers for all of their questions?

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lack of education and where unscientific doctrines have at times become unsavory to them is to watch them work with odds few American youth ever face and to see the gleam in their eye at graduation. Education is serious business, a pearl of great price, a personal achievement; and in these lands it is the only thing a man can be sure cannot be taken from him.

Christ, the great founder of the Christian religion, urged that the search for truth was a noble pursuit and therefore made ever vigorous a religion for men of all times. Last Christmas, as I read the Scripture at the traditional site of the shepherds on the hills near Bethlehem, I realized more than ever before the meaning and the value of the search for knowledge. That day I had visited the only hospital for the mentally ill in Jordan, administered by one of our own graduates who was experimenting with new ways to restore sanity. Later I visited his father's hospital in Bethlehem, where for years his mother had held a kerosene lantern while his father operated on the physically ill—youth and maturity seeking the truth, the light, to bring health and sanity to diseased minds and bodies. Here were the results of education at work in the restoration of health. Several months later I found them both in our Medical School reviewing their most troublesome cases and seeking new light on confusing problems.

"The truth shall make you free" can be fully comprehended only by the free mind, the mind from which the veil of ignorance has been lifted. The statement is an ancient one, nearly 2000 years old, but it is ever alive and modern. The man who knows and whose attitudes are right is the free man. He is the one whose joy of living is measured by his appetite for new ideas. He is the one who can judge and distinguish for himself. He is not dependent. One man buys an oriental rug only at a place where he has confidence in the dealer; another with knowledge is free to roam and buy at will, for he knows quality and values and cannot be deceived. The truth is the greatest release from fear and dependence any man can acquire. It can cause a man to reach into the deepest recesses of facts and falsehoods and sort them out with discernment so as to bring understanding and order to a confused world.

The Christmas message lies in the heart of the Christian philosophy, a philosophy of freedom and respect for all men. With such a philosophy, no matter whence it springs, all men become brothers in understanding and in respect for the common search for a better life. The result of such a quest can only be peace on earth.

Those of us to whom young minds are entrusted probably have a better opportunity and truly a greater responsibility to keep alive throughout the year the philosophy of the Christmas message than any other group. It is the heart and soul of our business. Those who keep Christmas best, keep its meaning constantly. The idea was born in a land where it was not understood, where its principles were so shocking that its creator suffered death. But ideas of merit have a way of surviving persecution and individual lives. The great idea has brought life to those who have adopted it. Let those of us who have profited most from it cherish it with reverence and sustain it with greater insight and responsibility as the years go by. We must either remain close to the promise of the star of Bethlehem or we will suffer the chaos of the cross.

—J. Paul Leonard, *president, American University of Beirut, Lebanon.*

# Curriculum News

Column Editor: Paul R. Klohr

## The Arts and Intellectual Development

AS WE consider this month's theme, "Education and Intellectual Development," it is especially heartening to note that the arts, all but submerged in the current torrential debate over education, will star in the 1959 convention of the American Association of School Administrators. For the first time in its convention history, AASA, meeting in Atlantic City, February 14-18, will turn its main attention to such fields as music, fine arts, drama, literature, and the dance. This emphasis at the national level may help us all to focus on critical questions related to the role of the arts in achieving balance in the curriculum. Clearly, there is much evidence to support the position that these areas have significant contributions to make to intellectual development.

Seldom do reports of curriculum experimentation, however, reflect a major concern with new developments in the arts. A few notable exceptions come to mind. There is, for example, a continuing concern to make creative experiences an integral part of the elementary curriculum of the Matthew F. Maury Public School in Richmond, Virginia.

George E. Mills, assistant superintendent, reports that the Edsel Ford Senior High School in Dearborn, Michigan, is entering its fourth year of an experimental program in English-humanities. This program, an outgrowth of cooperative staff planning, treats literature, music, and the visual arts as media of communication. Each student has work in this area throughout his senior high school career.

At the University School, Ohio State University, Jeanne Orr, Mary Tolbert, and the arts staff, working with both elementary and secondary school teachers, have conceived of music and related arts as a major component in the design of the total curriculum.

If you are aware of new developments in the arts which have significant curriculum implications, please help us to report them in this column.

If you seek stimulating reading in this field, examine the volume *Aesthetic Form and Education,* edited by Michael F. Andrews, Syracuse University Press, 1958. This is a report of two symposia composed of prominent educators interested in arts education.

• The Michigan Curriculum Program, a cooperative undertaking which involves approximately 575 individuals serving on 25 committees, gives help and direction to curriculum development in schools throughout that state. Typical of its efforts is the work of the newly established Committee on Core and General Educa-

tion. This group, Robert Koopman reports, has completed a survey of core in Michigan and is now engaged in a follow-up study of those schools with block-time classes to discover their needs, problems, and effective operating procedures. During the year, the Committee will work toward the establishment of regional core planning groups.

• A high school faculty interested in initiating a curriculum study may wish to examine the Form for Evaluating General Education Programs in Terms of Behavioral Outcomes. This checklist, included in the report, *Behavioral Goals of General Education in High School,* Russell Sage Foundation, New York, 1957, permits an individual to make a judgment about the importance of certain behavioral outcomes. It also provides for a judgment about the effectiveness of the school in furthering these behaviors. A specific curriculum innovation planned in the light of some such general stocktaking would have, from the outset, some base for evaluation. Thoughtful curriculum workers often find this base missing in many curriculum proposals.

• Sue Bushnell, who teaches a combined English-social studies class in Madison High School, Portland, Oregon, reports that continuous evaluation of this approach to curriculum organization in all ninth grades of the Portland schools, modifies the teaching procedures and the learning experiences that characterize each year's work. These classes, which provide a two-period block of time with one teacher, had their beginnings in experimental classes first taught over ten years ago. They permit students to use a wide variety of materials in a problem-solving approach to learning. More effective guidance and individualized instruction are also important outcomes, teachers have discovered.

• *The United Nations in the School Program,* a book being produced by the Committee on International Relations of NEA, will be a welcome resource to curriculum planners who recognize the value of learning experiences dealing with United Nations. The volume aims at providing teachers with useful classroom activities about the UN and its specialized agencies. An effort to interest teachers in contributing to the study and in forming study groups and workshops on the United Nations is under way.

## CAPCI News

The recent CAPCI survey on provisions for curriculum individualization has produced a wealth of new information about that aspect of curriculum development in schools throughout the nation. This information has value in the planning of other phases of this action program on the part of ASCD. It will help, for example, to throw light on the problem of how to organize and to channel the many resources of the national organization in order to be of greatest assistance to projects under way at the state and local levels.

Clinics at the 1959 ASCD conference are to be planned around state units' work in the three areas of the Association's Cooperative Action Program for Curriculum Improvement.

—Paul R. Klohr, *assistant dean, College of Education, The Ohio State University, Columbus.*

# Curriculum Bulletins

Column Editor: Marcella R. Lawler
Professor of Education
Department of Curriculum and Teaching
Teachers College, Columbia University
New York 27, New York

*NOTE:* The following faculty members of Teachers College, Columbia University, assisted in the preparation of this column by evaluating materials in their areas of specialization: Hubert Evans, Teaching of Science; Arthur W. Foshay, Horace Mann-Lincoln Institute of School Experimentation; Dorothy McGeoch, Curriculum and Teaching; and Willard Jacobson, Teaching of Science.

PERSONS who work in developing curriculum materials often say they find realistic assessment of the materials extremely difficult. They are aware of the expectations of those who worked long and arduously on preparation of the materials; they know why decisions were made that caused certain content to be included and certain organization to be followed. However, the ultimate criterion by which material must be evaluated is whether or not it assists not only staff members who contributed to it but also many other staff members to provide improved learning opportunities for pupils. Evaluation of the latter criterion can be made only over a period of time.

Workers may be assisted in evaluating their "finished" product by considering the criteria originally published in ASCD's *List of Outstanding Curriculum Materials,* 1951-54. Since school systems are increasingly engaging in the very important task of developing instructional materials your column editor is listing the criteria here. An adapation of these is used by the reviewers of the bulletins discussed in this column.

## Criteria For Evaluating Curriculum Materials

1. Does the material reflect reliable scholarship in a given area?

a. Is the information presented dependable and accurate?

b. Do recent findings and/or interpretations permeate the material?

c. Does the work reflect an awareness of the social situation in which the school operates?

d. Is sufficient background information included or are relevant references cited for teachers, if necessary, for understanding the topics or problems?

2. Are high quality teaching-learning situations suggested?

a. Are they consistent with most sound principles of learning?

b. Are they in keeping with the age group for which they are suggested?

c. Do they make provision for individual differences among learners?

d. Are they fresh, unique, creative, original?

e. Is sufficient information included

for teachers to sense the setting out of which a suggestion develops, and relationships among suggestions?

f. Is a need for "teacher readiness" to use the suggestions recognized? Is sufficient detail for implementation included?

g. Is there consistency in any stated philosophy for the area, desired outcomes, and included teaching suggestions?

h. Are valid suggestions for evaluating results included?

3. Is there a highly useful section suggesting instructional materials and resources relevant to the area of concern?

a. Is a variety of types of materials cited?

b. Are suggestions under each type extensive and up-to-date?

c. Do the listings recognize varying interests and abilities?

d. Are appropriate community resources listed for use?

e. Are all listings complete—that is, sources of materials, or persons to contact in the community, and so on?

f. Is there sufficient annotation for making an accurate choice for use?

4. Does the production scheme seem to be well conceived?

a. Is the producer, individual or group, identified?

b. Were the most appropriate persons involved in producing the material?

c. Is the production process described at all?

d. Is the combination of producer and process such as to insure a quality product?

e. Is the combination of producer and process such as to aid in the acceptance of and use by teachers of the material?

5. Is the material organized for easy and efficient use?

a. Title truly descriptive of content?

b. Table of contents complete and functional?

c. General organization uncluttered and effective?

d. Are helpful suggestions for teachers included?

6. Is the format attractive and appealing?

a. Cover design?

b. Use of color?

c. Arrangement of page?

d. Size and clearness of type?

e. Quality of paper?

## Curriculum Bulletins

• Los Angeles County Schools. *Guiding Growth in Written Expression,* Vol. II. Middle Grades. Los Angeles, California: the Schools. August 1957. p. 159.

Congratulations to the County Office staff and teachers who participated in developing this very fine supplement to *Educating the Children of Los Angeles County: A Course of Study for Elementary Schools.* The extensive listing of teachers found in the foreword is evidence of teachers' interest in and work on this guide and accounts for the wealth of examples of children's work in the material. Fine photographs of children at work further enhance the presentation.

The discussion is organized into five chapters. The first chapter, "I Have an Idea," reintroduces us through a fresh, richly illustrated discussion to the concepts that ideas are encouraged by the teacher's way of working, and that resources for writing must be built. In developing the first concept, ideas are discussed in relation to important needs in the social as well as the physical and psychological development of children. "I Want to Write" reports the work of

children and teachers as they develop skill in writing. Many examples of children's work are introduced and ways teachers worked with individuals and groups are reported. "I Wanted to Say" assists us in learning how the teachers guide children through all the steps in the process of writing, encourage responsibility and independence and develop procedures to help individuals meet their writing problems. In answering the question, "How Am I Doing?" we are helped to understand the problems of the child who is inexperienced in writing, the one for whom English is a second language and the one who is shy and inhibited. We are also impressed through examples, such as the following one, that some children do write as well as adults.

HANNABELL LULUBELLE

Hannabell Lulubelle was a grandpa lady fish with no tail. He was a plain purple fish. Just think, a plain purple fish, but he was green. He lived in the orange water of the Yellow Sea, and sometimes it was wet. You never can tell with water. He had one head and with his two heads he could see everything in the sea. He was the slowest one in the ocean because he could beat all the other sea creatures in a race. Hannabell was so brainless that all the fish came to him for information. He had four teeth, but he could chew best with three others, because the four first ones were sore. He was blind and could see everything but what he could not see which was nothing. He loved seaweed, so he never ate it. Hannabell Lulubelle had a very bad pedigree too. You see, Hannabell Lulubelle was not a fish at all.

TERRY, *age 10*

• Cincinnati Public Schools. *General Science, Junior High School, Grade Nine*, Curriculum Bulletin 22. Cincinnati: the Schools, 1958. 268 pages.

Cincinnati has been successful in developing a general science guide which points the direction for a stimulating science program for ninth graders. Suggestions for concept development go beyond the traditional suggestion found in science materials for this grade level.

The program is developed within a rationale which includes consideration of our modern technological society as well as principles of child growth and development. The teacher who asks, "What do these areas mean for my teaching?" will find many activities, materials, and experiments suggested in this guide.

For each of the areas treated, approaches to the work are presented, concepts to be developed are suggested, teacher and pupil activities are proposed, and instructional materials are listed. This guide can furnish a base line for interesting and exciting work.

• San Diego City Schools. *A Guide to Sea Shells and Seashore Life*. Prepared by Harlan L. Wilson. San Diego, California: the Schools, 1957. 83 p.

This guide will assist San Diego teachers in their study with children of sea shells and shore life, an important area to explore with these children who live near the sea. The material will help children and teachers to identify some of the life forms to be found on their seashore and to understand the adaptations that these animals have made to their environment.

The material in this guide is organized for easy and efficient use, the illustrations are excellent and many helpful suggestions are included for teachers. There is a danger sometimes that the study of seashore life will fail to move beyond collection and identification. As a safeguard, it might have been well to have extended both in number and depth the excellent suggestions for developing understandings. Descriptions of how to work to develop more professional

understandings might well have been included.

More communities need to develop guides such as this one to help teachers and children in the study of local phenomena.

• State Department of Education. *The Elementary School Program in California, Handbook for the Orientation of Teachers.* (Revised.) Sacramento: the Department. Vol. XXVI, No. 2. April 1957. 54 p.

This handbook provides an excellent list of topics to which attention should be given during the orientation of teachers new to a situation. While it has been prepared to aid school systems in California in developing their program for new teachers, many of the discussions center on areas basic to effective education in any situation. For example, such questions as these are discussed: "What Is Meant by a Curriculum Unit Based on Broad Areas of Life Experience?" "What Methods Are Effective in Teaching a Curriculum Unit?" "How Are the Skills Related to the Curriculum Unit?" "What Is the Best Approach to Beginning Reading?" "What Are the Developmental Stages in Learning to Read?" and "How Can the Teacher Maintain Sound Relationships Between the Home and the School?"

The material is well organized. The reviewer's comment, "The book is expert and on target," is most appropriate.

• New York State Education Department. *Handbook for Applied Music, Grades 7-12.* Albany: the Department. 183 p.

This publication is directed at both administrators and music teachers and supplements an earlier syllabus. Applied music is viewed by the department as covering all musical performance; theoretical music is seen as the study of music as a language of expression. The first part contains general information about the administration of the music program and the guidance of pupils who can profit from it. The second part consists of carefully chosen and graded lists of music selections and methods books for instruction in voice, band, orchestra, chorus, ensembles, and individual instruments. The bulletin stresses the viewpoint that music is an integral and essential part of the program and "reflects the growing maturity of American culture." As a source book, this publication is comprehensive and well organized.

• San Bernardino County Schools. "Arithmetic For Today's Children and Youth." Volume I: *A Guide to the Teaching of Arithmetic in Grades 1-3.* Volume II: *A Guide to the Teaching of Arithmetic in Grades 4-6.* San Bernardino, California: the Schools, 1958. 94, 137 p.

Two of a projected three-volume series, these arithmetic manuals present a sound point of view on mathematics in the program of children. The illustrations, grade placement of topics, and suggestions for developing understandings are presented through a series of tables which indicate where situations can be adapted naturally in the course of children's activities, where systematic instruction should be provided for the majority of pupils, and where planned work may be used to deepen insights and maintain skills and abilities. Sections on instructional materials are studded with useful aids. The bibliography contains children's recreational books as well as references for teachers. The format is unusually attractive and well designed. These are two very good manuals.

# Curriculum Research

Column Editor: Alexander Frazier
Contributors: Roy A. Edelfelt
and Richard Spencer

## Getting Started on a Curriculum Research Project

*NOTE:* The purpose of this article is to give a blow by blow description of how a piece of research begins to get under way. It also tries to report some of the problems involved in setting up a problem by members of a school staff.

In the process of describing the above some generalizations are developed which may be of value to others interested in involving teachers in curriculum research.

Although a genuine attempt is made by the writers to be objective the following necessarily represents the perception of only two persons.

• • •

A SCHOOL district located near a university had been concerned for several years about the problem of more adequate provision for individual differences among students. The administration of the school revised some course offerings, established a type of homogeneous grouping, and altered certain course content, sequence and continuity. A manual, known as the "Classification Manual," was written to explain local homogeneous grouping policies. It was recognized after the second year of this project that the teachers' understanding and acceptance of these changes were not equivalent to the administration's hopes.

At this point university assistance was requested by the administration. A one-quarter, graduate seminar in secondary curriculum problems was arranged with a university instructor serving as chairman and consultant. Enrollment in this seminar was restricted to 18 people. Fifteen people enrolled, about 50 percent administrators and 50 percent teachers.

After the first meeting, the chairman (university instructor) attempted to gather together purposes as expressed by the seminar members and the school administration. These main purposes were to:

1. Analyze, discuss and experiment with ways of improving instruction in the classroom through more adequate provision for individual differences
2. Clarify understanding of the administration's "Classification Manual"
3. Give attention to theoretical and philosophical issues related to individual differences among students
4. Develop recommendations for the initiation of a more effective plan for providing for individual differences at the junior high school level. Changes, modifications or elaboration of the "Classification Manual" were expected.

To achieve these purposes a major portion of time during the quarter was spent in: discussing opinions and attitudes about the problem of individual differences, the organization and structure of the school program, the curriculum as it existed and the power structure in the local situation; gathering evidence on how students are different and what provision teachers are making for these differences; strengthening communication among seminar members.

Two methods of gathering data were especially effective:

1. Making a survey of faculty attitudes toward grouping
2. Interviewing a number of teachers for descriptions of the way they were identifying and handling differences among students.

There was detailed analysis and discussion of the survey and the reports of classroom teachers. Gradually the group members developed more ability to discuss with freedom most aspects of the problem. There developed, too, a respect for differences in opinion. The members became quite verbal in their distaste for autocratic administrative policies, extensive administrative memoranda, teacher resistance to change, etc.

The group attained a fairly high degree of solidarity; for example, there was unanimous agreement by the group that something *had* to be done about individual differences.

The above solidarity yielded an atmosphere which can best be defined as a "honeymoon" effect, (i.e., good group spirit, we-feeling, and appreciation of common problems) despite salary, status and opinion differences. The group established many common feelings and attitudes; however, only some of these were related to the problem at hand. Many such feelings were due to the acceptance of similar positive and negative attitudes on methods of operation, philosophy, and personalities. To this point thoughts and opinions expressed on the problem were more theoretical than practical. Attempts to translate theory into action were usually fraught with indecision and frustration. Continued frustration was reduced by finding tangents or more comfortable topics.

To the chairman it seemed that a lack of discussion skills and an awareness of process were problems which blocked progress. In order to foster some thinking and reflection, the chairman suggested that a group observer be brought in. The group seemed to recognize the validity of the observer's anaylsis on group participation, inability to stay on the topic, and subgroup alignments of seminar members. However, the group showed little perceptible change in behavior as a result of his observations. Apparently the group was not ready to do more than verbalize on its process.

Toward the end of the quarter the group recognized that attempts to develop a research project to experiment on the problem of individual differences were confronted by:

1. Apathy, indifference, or resistance to change
2. Difficulty in altering administrative-teacher relationships in order to develop productive working relationships
3. Conflicts between ideas and vested interest or power groups
4. A lack of effective communication
5. Inability to translate agreed upon theory into practice.

The accomplishments for the quarter were:

Establishment of a positive group atmosphere

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Willingness to verbalize many aspects of the problem

Better administration-teacher relationship for those involved

The development of some clarity as to what a research-oriented proposal is.

Seminar members agreed that an extension of the seminar for another quarter would enable completion of some definite proposals to present to the administration. A second quarter of this seminar was arranged.

## A Second Quarter

Approximately half the seminar members chose to continue for a second quarter. The favorable comments on the first quarter's work resulted in a registration of 25 people.

There were quite naturally some differences between seminar members who had worked together for a quarter and the collection of people who comprised the new group. But after a brief review of the first quarter's achievements and frustrations, work proceeded, seemingly more rapidly and at a higher level of sophistication than was evident during the first quarter. It was apparent that a good deal had been communicated informally, outside of the seminar, to new members.

The seminar members concerned themselves with action steps to:

1. Revise the administration's "Classification Manual" (a duplicate of the first quarter proposal)
2. Develop proposals which would put into practice theories developed on individual differences
3. Appraise and report on research evidence on grouping
4. Organize a research design for measuring effects of homogeneous grouping in each of several subject areas

5. Obtain opinion and ideas from all participating teachers and students on homogeneous grouping in general, and on the courses in which such grouping should be tried.

The group's size made total group discussion less productive than during the first quarter. Small groups were initiated on topics of interest which included all of the action steps above.

As a result of the second quarter's work four groups presented concrete, research-oriented proposals, for submission to the administration:

1. Expressed a need for verification of any system of grouping tried
2. Recognized the necessity for in-service education for teachers in new procedures
3. Recommended a review of present selection, continuity, and appropriateness of content
4. Recognized a need for more attention to the appropriate placement of students in courses and sections
5. Reflected an awareness that there is more involved in teaching than the academic aspects
6. Gained a greater respect for the problems administrators face in scheduling and curriculum organization
7. Recognized the need for better communications in the school system
8. Noted the desirability of identifying teacher competencies and interest in teaching, e.g., some teachers prefer work with superior students, some with lower socioeconomic groups.

The recommendations also indicated:

1. A continued emphasis on textbooks
2. An overemphasis on use of test results
3. Lack of attention to keeping parents informed and participating in curricular change.

Process was slow and often cumbersome but rewarding in that there developed a mutual understanding and a shared commitment for experimentation. Offering the seminar for two quarters provided an opportunity for members to drop out, without loss of face, and permitted new people in sympathy with group goals to join. The procedure yielded recommendations developed and supported by faculty, not imposed by the administration. The failure to apply analysis of process to group methods showed that verbal understanding may not transfer to behavioral skills.

Assistance from an outside university can, and perhaps did, establish a neutral corner to assist in focusing on problems more than on personalities. It may also carry with it the implicit necessity for facing problems on a rational basis. And, of course, it permits drawing in additional resources which would not otherwise be available.

A university representative cannot easily transfer the responsibility for action on proposals unless there is continued support and excellent communication with the administration. The freedom an outsider can permit may also develop values and goals not acceptable in the local school district which may further complicate or block transfer. For this situation an assessment of action steps is not yet timely.

The most significant outcomes for curriculum research were a recognition that innovations need to be tested, and the beginning of a feeling of respectability with experimentation, whether it verifies or negates one's own point of view.

—Roy A. Edelfelt, *assistant professor, College of Education, Michigan State University, East Lansing; and* Richard Spencer, *director of testing, Jackson Public Schools, Jackson, Michigan.*

# Letters to the Editor

## An Approach to the Teaching of Reading

Cleveland, Ohio
October 15, 1958

Editor, *Educational Leadership*
Dear Sir:

The teaching of reading has always been a central concern of educators. This was true when the school curriculum was narrowly limited to the teaching of the "Three R's." It has perhaps been even more true during recent decades since the curriculum has been expanded and enriched. Educators have done more research in reading than in any other field. The professional literature abounds with significant studies about reading. People in the related disciplines of psychology, biology, anthropology, and sociology have contributed richly to our information about factors that influence children's ability to read.

Sometimes it would seem that this research has been directed more towards an explanation of why some children make slow progress in reading. We have been more sensitized to the effects of emotional problems, environment, varying learning rates, eye development, learning capacity, and the like. This information has made us more understanding, perhaps more patient. It has also provided us with some legitimate excuses for our less successful teaching efforts. This has been comforting. The knowledge that we have gained has had less of an effect, however, upon our ways of teaching children to read.

To be sure, we more nearly recognize the importance of the pre-reading period. We plan excursions with the children and record the events in "experience stories." We introduce children to the wealth and wonder of the glorious children's literature. We make liberal use of pictures to study sequence of activities, likenesses and differences. We help develop auditory discrimination through the use of rhymes and sound games. We use standardized instruments to help evaluate the child's readiness for reading and, later, his progress.

When we begin to teach reading *per se* it is the general tendency to do so in small groups. The traditional number is three. It is becoming less popular to call these groups "Red Birds," "Blue Birds," "Fairies," 'Butterflies," or similar fanciful names. It is somehow considered better taste or more modern to designate them "Mary's Class" or "Tom's Group" or "The Class Reading 'Skippy.'" Each group takes its turn in joining the teacher for the reading of the day's story. Once the class has assembled the usual pattern is to introduce the new words, ask the children to read the material silently, and then have each child read a portion of the story aloud. Interspersed with this process questions are asked to test comprehension and to invite reaction to the story. It is customary during this reading class to have some children whose attention wanders, be it to harmlessly looking

out the window or to annoyingly teasing the classmate in the neighboring seat. There are others who become quite bored with the slow pace of the reading. Their turning of the pages is more rapid than the majority so that when it is their turn to read aloud they must be brought back and shown the place.

Every teacher has experienced the dilemma of grouping children for reading instruction in an acceptable manner. Learning rates and potentials vary so. Within the limits of the traditional three groups the range is often so great that the teacher has misgivings about the group assignment. Would it be better for Jim to be thought of as a "good reader" in the middle group or would it be more stimulating for him to be considered a "fair reader" in the top group? Sometimes the teacher resolves this quandary by having Jim meet with both groups. Every teacher has experienced also the social pressure that some parents exercise in relationship to the reading group assignment of their own child. Social prestige is threatened by an assignment to the middle or lowest group. True, usually the child does not recognize the status threat but the parents feel it keenly! There are times when a teacher regroups a child in order to protect him from parental attitudes.

## Individualized Reading

In spite of some of the instructional disadvantages to the traditional reading groups, some of which are suggested above, the pattern continues to be the accepted one. There are some voices being raised that advocate a different teaching method, namely, an individualized reading program. Some teachers have been quietly using this plan for years. Out of their own experience they learned that this was a more effective approach to reading. Some of these teachers have written about their work as indicated by occasional articles in professional magazines. Teachers College, Columbia University, has developed, under the direction of Alice Miel, an excellent film entitled "Individualizing Reading Instruction in the Classroom." Perhaps the experiences of these people will encourage other teachers to explore the possibilities of this different approach.

The need for an individualized reading program is probably greater on the upper elementary level than the primary. The biggest reason for this is the ever broadening range of reading abilities that becomes apparent. Within almost any average class group we find a reading achievement differential of several years. It becomes increasingly difficult to group the children effectively for instruction. Many teachers have learned that it makes better sense to help the children select appropriate books and then let them read at their own rates. During the reading periods the teacher visits with the individuals—perhaps a dozen one day, a different dozen the next—sometimes hearing them read a portion of the book aloud, perhaps just chatting about the story. Sometimes written book reports are required. Often children are invited to talk about their books to the total class so that appreciations may be broadened and reading further stimulated. There are usually some in the class who would benefit from a small reading group experience. The teacher then meets with those children as a group during a portion of the reading period. In association with the reading done in the content subjects, the teacher promotes such particular reading skills as scanning, outlining, summarizing, etc.

*(Continued on page 200)*

# Significant Books in Review

Column Editor: Howard B. Leavitt
Contributors: Melvin R. Karpas
David Z. Tavel

**Juvenile Delinquency.** ***By Joseph S. Roucek, editor.*** *New York: Philosophical Library, Inc., 1958.*

This book is for people who wish to examine thoughtfully the perplexing problem of juvenile delinquency. The book suggests that an adequate understanding of criminal behavior is based on the theory of multiple causation, that it is always a combination of causes which produces juvenile delinquency, and that this combination varies from one case to another. Two fundamentally opposed views clash in the treatment of the juvenile delinquent. One is the view that the delinquent must be censured and punished because of the act committed against society and in order to deter him and others from further acts of delinquency. The other is the view that the goal of treatment should be the protection of society and the rehabilitation of the juvenile delinquent into normal law-abiding activities.

Written by specialists—and thus authoritative, although sometimes wordy—a series of chapters covers many of the relevant causative factors of delinquency, i.e., legal, biological, psychiatric, sociological, economic, cultural. Chapter II, "The Legal Aspects of Juvenile Delinquency" makes the interesting observation that ". . . delinquency is a legal concept and delinquents are lawbreakers even if not criminals. . . . We need to give delinquency clarity and substantive meaning in law before we can even define the problem we are attacking. And, if the civil rights of children are injured in our attack, then the cure is worse than the disease."

The psychiatric approach must be recognized as being mainly a value-laden position as to how delinquents should be viewed and dealt with. It cannot be looked upon as representing a scientifically founded set of understandings and skills specifically applicable to the treatment of delinquents. The sociological approach regards delinquency as deviant behavior which is learned predominantly from association with delinquent peers. Among the cultural factors in contemporary America that are relevant to an understanding of delinquency are (a) social disorganization, (b) cultural heterogeneity, (c) internal migration, (d) rapid technological change, (e) urbanization, and (f) America's "unique" traditions. While the school is of major importance and significance as an agency in delinquency prevention it needs the cooperation of other community agencies in order to do its best work in this respect.

The chapter on "Rural Delinquency" suggests that rural deviant behavior must be studied before we can arrive at a more complete understanding of the whole problem of juvenile delinquency. The data on mass media indicate that no positive correlation can be established between the content of mass media and de-

linquent behavior. There is a need here for additional research efforts. A theme agreed upon by several of the researchers is that although a great diversity of behavior by children comes to be labeled "delinquency," initially distinct types seem to merge into each other perhaps because delinquents increasingly develop common subcultural traits the more they are exposed to identical treatment by noncriminal society and its official agencies.

The consideration of the international trends in juvenile delinquency, a topic too often ignored in many textbooks, is considered, but insufficiently. A cooperative-community approach, such as that advocated by Kvaraceus and others, for the identification and diagnosis of school delinquents appears to be missing in the section on education. The book, despite its disciplinary biases, and lack of remedies, is an important contribution to research, particularly in highlighting those areas with a paucity of knowledge about specific factors, causes, and preventatives of delinquency. Each chapter is well-written, although the communion of ideas could be more neatly tied together.

The volume provides much thought-provoking material, both for teachers of sociology, social work, mental health, and for those interested in the solving of the problems of youth.

—*Reviewed by* MELVIN R. KARPAS, *assistant professor of social science, Willimantic State Teachers College, Willimantic, Connecticut.*

**Education in Society: Readings.** ***By Bernard N. Meltzer, Harry R. Doby and Philip M. Smith.*** *New York: Thomas Y. Crowell, 1958. 498 p.*

The compilers of this volume have presented a series of readings useful as supplementary material for courses in educational sociology, and have correlated their articles with six texts in the field. The book is organized in the logical pattern typical of the various subject matter disciplines, rather than on the basis of existing social problems. After a brief section introducing the field of educational sociology, the remaining parts discuss the culture and the school, cultural change and problems of education, the social functions of education, the social control of education, the school and the community, the teacher as a person, the student as a person, social factors in the learning process, and controversial issues in education.

This latter section, which one would hope to be the strongest part of the book, is the weakest. The first issue in this section is entitled "The 'Progressive Education' Controversy." The desirability of such a name for this problem is questioned in the very first selection, where Paul Woodring paraphrases John Dewey in stating that the fundamental issue is not whether progressive education is superior to some other type of education. Another "authority" on progressive education whose ideas are included in this discussion is Albert Lynd. (There is a noticeable variation in the quality of contributors to this book.)

The choice of titles for the section on progressive education and articles dealing with the "controversy" is unfortunate in that progressivism is represented as one extreme on a sliding scale whose other limit probably is ultra-traditionalism. But there is nothing radical about progressive education. Indeed, congeniality with prevailing economic, political, and social opinion has been a definite tendency of the progressivist.

The authors have dealt with the subject matter of the twentieth-century so-

cial scientist. In this event, there might have been the anticipated use of the methods of the social scientist. In no explicit way does one find the readings centered around problems upon which students might hypothesize, criticize or structure eventual discussions.

A second controversial issue is entitled "The Problem of Desegregation." This is, however, not a problem in and of itself, but rather one phase of a larger question, the issue of second class citizenship. To what extent is the existence and maintenance of second class status—for not only the Negro but the Spanish-American, the Oriental, the Mexican—compatible with the democratic process?

A volume dealing with education and society should be concerned at length with the intellectual schizophrenia of our society. The root of this problem lies in the existence of absolute values in a culture which also has relative values. Values derived from the experimental method are unlikely to maintain compatibility with values derived from something beyond nature. This is the critical factor which no consideration of the school and society can overlook. Although Meltzer, Doby, and Smith have envisaged their book as a supplement rather than basic text material, it will be difficult to justify their failure to get at the heart of the issue of value conflicts, to discuss its causes and—even more important—its effects.

—*Reviewed by* David Z. Tavel, *Colorado State College, Greeley, Colorado.*

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*(Continued from page 197)*

There has likely been less experimentation with an individualized reading program on the primary level. Yet some teachers have discovered the rich possibilities here and would recommend it to others. Perhaps the most rewarding efforts come from using the individual method with those children whose reading achievement lies most distant from the median—that is to say, the more advanced children and those who are making the slowest progress. We tend to retard the abler children when we hold them to a group situation and have them wait their turns to read. They should be helped to soar and feel the absorbing joy of the printed pages. The slower child usually gains more from five or ten intimate minutes with his teacher and his book than he gains from a half hour in a reading group composed of his classmates. His attention can be more easily held and he benefits emotionally as well as academically from "time alone with teacher." Of course the teacher must keep a record of each child's reading progress. This might be a notebook with several pages reserved for each child upon which are noted the book title, page, vocabulary problems, phonetic weaknesses, and similar teaching guides.

In recent years we have frequently heard the term "action research." This writer would like to encourage more teachers to pursue this type of research as related to an individualized reading program. Let us question the long accepted tenet that reading is best taught in groups. Let us search for other methods that may be more productive.

Sincerely yours,

Sarah E. Goodhue
Director of Elementary Schools
Orange Schools
Cleveland 24, Ohio

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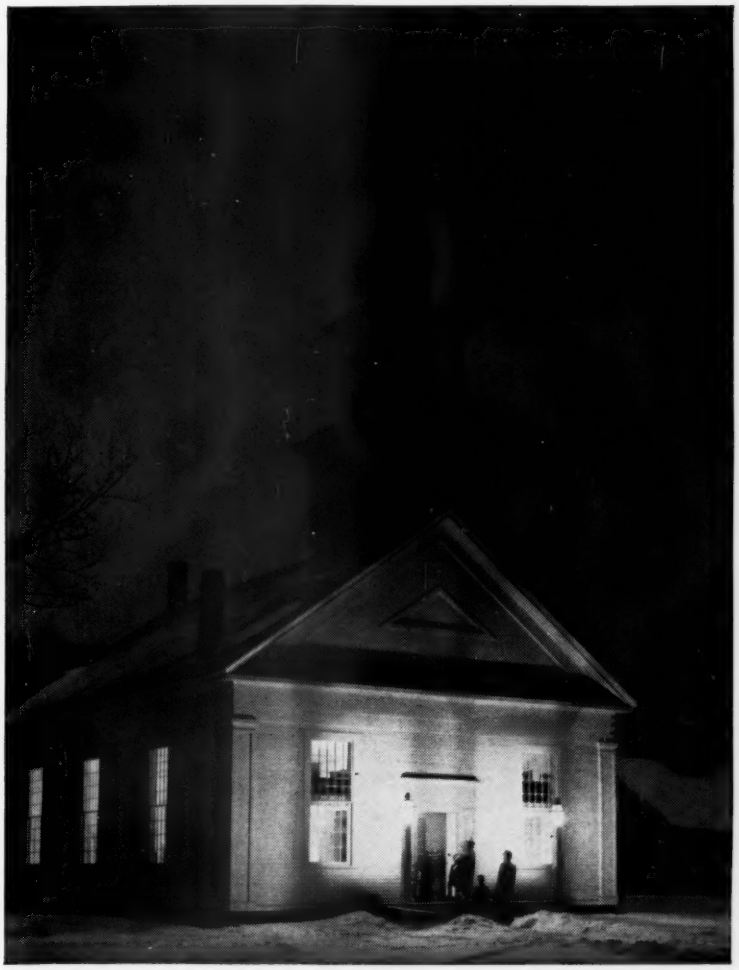

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